AMERICAN JOURNAL OF ARCHAEOLOGY



THE JOURNAL OF
THE ARCHAEOLOGICAL INSTITUTE OF AMERICA
PUBLISHED QUARTERLY BY THE INSTITUTE
APRIL-JUNE 1940
VOLUME XLIV. NUMBER 2

Printed by The Rumford Press, Concord, N. H.

BOSTON UNIVERSITY
COLLEGE OF LIBERAL ARTS
LIBRARY

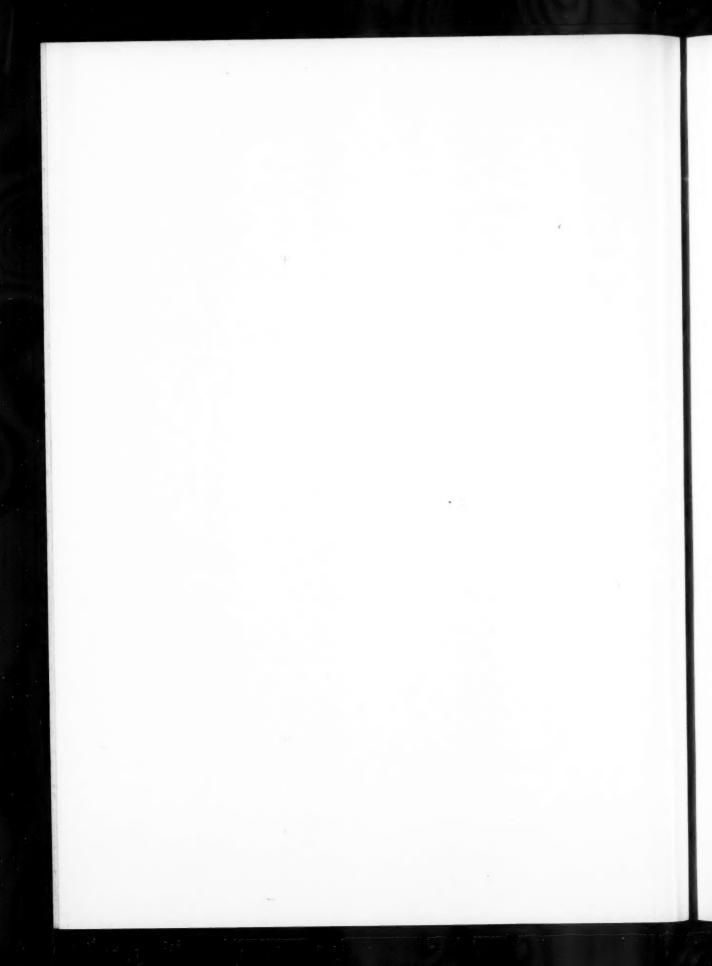
OF AMERICA

The Forty-second General Meeting of the Archaeological Institute of America will be held at Baltimore, Maryland, December 26–28, 1940. The Annual Meeting of the Council will be held during this period.

Members of the Institute and others who wish to present papers at the meeting are requested to send the titles and brief résumés of their papers to Mr. H. T. Westbrook, General Secretary, Archaeological Institute of America, 504 Schermerhorn Hall, Columbia University, New York, New York, before November 1, 1940.

CONTENTS

BEAZLEY, J. D Postscript to Prometheus	212
BRONEER, OSCAR-Excavations on the Slopes of the Acropolis, 1939	252
ELDERKIN, G. WBronze Statuettes of Zeus Keraunios	225
ELIOPOULOS, SOCRATES M.—The Ramp of the Temple of Asklepios at Epidauros	222
MYLONAS, GEORGE EGreek Vases in the Collection of Washington University in St. Louis	187
RICHTER, GISELA M. ARecent Acquisitions of the Metropolitan Museum of Art	181
WALLACE, MARY-Sutor Supra Crepidam	213
Archaeological News and Discussions-Stephen B. Luce	234
Necrology	235
General and Miscellaneous	236
Egypt	236
Mesopotamia	237
Syria	237
Palestine	237
Arabia	238
Greece	238
Italy	243
Early Christian and Byzantine	245
Mediaeval	248
U.S.S.R.	249
Archaeological Notes	181
Bibliography of Archaeological Books, 1939 - David M. Robinson	286
Book Reviews – Edith Hall Dohan	257
Excavations on the Slopes of the Acropolis, 1939—Oscar Broneer	252



ARCHAEOLOGICAL NOTES

RECENT ACQUISITIONS OF THE METROPOLITAN MUSEUM OF ART

An important seventh-century bronze statuette and several interesting terracotta vases have recently been acquired by the Metropolitan Museum. They are herewith briefly described.

The bronze statuette, which is said to have come from Crete, represents the upper part of a female figure (figs. 1–3) with arms uplifted and wearing a high polos. The *Etagenperücke*, large head, enormous eyes, and broad nose are characteristic of the seventh century. We may tentatively assign the figure to the latter part of that century—about the time of the statue from Eleutherna ² and of the heads on Early Corinthian pottery, ³ to which it is stylistically related.

It will be observed that on top of the headdress of our figure is a large, round dowel and that her raised hands are not completed on top, but are cut at a slightly oblique angle—evidently to fit another object. Moreover, the bottom surface is apparently a fracture, somewhat smoothed by time. Probably, therefore, the bronze was part of a statuette of a woman—represented in a tight-fitting, perhaps belted, sleeveless chiton (as indicated by the grooves at neck and arms)—and formed part of a large utensil. What the latter was we can only surmise. Perhaps it was a tripod with cauldron supported on three statuettes, for we know that this form existed in the seventh and sixth centuries; 4 or an elaborate vase with figures grouped round the neck, like the terracotta example recently found in the Kerameikos, 5 for the Kerameikos ladies bear a marked resemblance to ours, except that they are earlier in style. And doubtless there are other possibilities. As not many bronze seventh-century utensils have survived, our knowledge of them is necessarily incomplete. Whatever the object was, the large scale and careful workmanship of our figure suggest an important ensemble.

A terracotta ointment jug in the form of a bust of a young woman ⁶ (figs. 4, 5) is a good example of a well known East Greek type. It is made in a two-piece mould, with the circular mouth added freehand, and a few details, such as the nostrils, incised before firing. Matt, purple-brown paint is used for eyebrows, eyelids, irises; the whites of the eyes are painted white; the long, undulating tresses are covered with black glaze, and the earrings are black with red and white rosettes (central red dot surrounded by four white dots). The effect of the whole is distinctly engaging.

Similar specimens (there are attractive variations) are in the British Museum, the Ashmolean, the Louvre, the Cabinet des Médailles, the Vatican, the Villa Giulia,

¹ Ht., as preserved, with dowel, 3½ in. (8.9 cm.). Smooth, brown-green patina with numerous red copper-oxide areas. Acc. no. 39.11.12. Cf. BMMA. xxxiv, 1939, pp. 286 ff., figs. 2-3.

² Good illustrations of the head in Jenkins, Dedalica, pl. VIII, 1.

³ Payne, Necrocorinthia, pl. 47, 7-9.

⁴ Cf. Schwendemann, "Der Dreifuss" in JdI. xxxvi, 1921, pl. adjoining p. 98, nos. 28–30, and pp. 139 ff.
⁵ Kübler, AA. 1933, cols. 268 f., 273, fig. 8.

⁶ Ht. 3¾₁₆ in. (8.1 cm.). Hearst Sale Catalogue (Sotheby & Co., July 11–12, 1939), no. 191. Intact; the clay has turned grayish in a reducing fire. Acc. no. 39.11.7. Cf. BMMA. xxxiv, 1939, pp. 287 ff., fig. 1.







Figs. 1-3.—Upper Part of a Bronze Figure, VII Century B.C. (Courtesy of the Metropolitan Museum of Art)





Figs. 4-5.—Terracotta Ointment Vase, Perhaps Early VI Century B.C. (Courtesy of the Metropolitan Museum of Art)



Fig. 7.—Scene on Toilet Box Shown in Fig. 6. Birth of Aphrodite (Courtesy of the Metropolitan Museum of Art)

and the museums of Berlin, Munich, Bonn, Copenhagen, the Hague, Rhodes and Boston. To Some have been found in graves with objects perhaps assignable to the early sixth century B.C. And this is the period to which the type stylistically belongs; for when we compare it with the heads on Corinthian pottery, it resembles the Middle Corinthian specimens of about 600–580 B.C., Tather than the Early or Late Corinthian.

A red-figured Athenian pyxis ¹⁰—or kylichnis, as we should now call such toilet boxes ¹¹—is remarkable for the scene painted on it (figs. 6, 7). A young girl, clothed

in a chiton and himation, is running toward a winged youth, who stretches out both arms to support or welcome her. On either side of this central group are women bringing sashes, a perfume vase, a branch, and a chest for toilet articles. They are full of excitement, large-eyed, running toward the central figures, one turning round to her companion, her hand raised in astonishment. Clearly something unusual has happened. But who are the young girl and the tall winged figure causing this stir? One might think of a soul, welcomed by Thanatos, Death; but the joyous gestures of the women do not suggest the tomb. Is the girl then perhaps a bride welcomed by Eros, the god of love? Hardly, because she is smaller than her companions and obviously intended for a child, whereas Greek brides, however young, are rep-



Fig. 6.—Attic Tollet Box (Courtesy of the Metropolitan Museum of Art)

resented as grown up in the many bridal scenes that have survived. There is one young person, however, who would be fittingly welcomed by Eros and whose arrival would create unbounded excitement—the goddess Aphrodite. The birth of Aphrodite, therefore, is the ingenious suggestion made by J. D. Beazley ¹² for our scene. And he points to a similar picture on a pyxis in Ancona, ¹³ where Aphrodite is also welcomed by Eros ¹⁴ and where there can be no question that the birth of Aphrodite is intended, for not only are Zeus and Hera and Peitho present, but Aphrodite herself is depicted

⁷ For recent discussions of this type cf. V. H. Poulsen, From the Collections of the Ny Carlsberg Glyptothek ii, 1938, pp. 103–107; Knoblauch, Studien zur archaisch-griechischen Tonbildnerei (Diss., Halle, 1937), pp. 40 f., 84 f., 132 f., 141 f., nos. 119–127. A volume in the Beazley-Jacobsthal series on these and other archaic moulded vases by Martin Robertson is in preparation.

⁸ Cf. Poulsen, op. cit., pp. 103 ff.

Cf. Payne, op. cit., pl. 48, 1-4.

 10 Said to be from Greece. Ht. with cover, as restored, $4\frac{5}{8}$ in. (11.8 cm.). Ht. of figured scene $2\frac{3}{8}$ in. (6 cm.). Intact except for a few chips. Acc. no. 39.11.8. Cf. BMMA. xxxv, 1940, pp. 37 ff., figs. 2, 4.

¹¹ Marjorie J. Milne, AJA. xliii, 1939, pp. 247 ff.

¹³ Marconi and Serra, Il Museo Nazionale delle Marche in Ancona, p. 53. It is soon to be published in the Rivista del R. Istituto Italiano di Archeologia e Storia dell'Arte in Roma—so E. Galli, the director of the Ancona Museum, kindly informs me.

¹⁴ For other instances where the youth Eros welcomes the new-born Aphrodite cf. e.g. the silver medallion in the Louvre and the hydria in Genoa (*JdI*. xxvi, 1911, p. 111, figs. 39, 40), and three unpublished scenes to which Beazley calls my attention—fragments in Agrigento and Amsterdam, and a hydria in Syracuse; in all Aphrodite is rising, not running. Cf. also Pausanias V, 11, 8.





Figs. 8-9.—Attic Cup in the Form of a Ram's Head (Courtesy of the Metropolitan Museum of Art)





Figs. 10-11.—Fragment of a Loutrophoros. Combat of Greeks and Amazons (Courtesy of the Metropolitan Museum of Art)

as rising from below the surface in the customary manner of such birth scenes. Our rendering, with Aphrodite represented as a little girl running, is an interesting variation. The women hurrying to her must be the Horai or Seasons, who, we are told in a Homeric Hymn to Aphrodite (VI), "welcomed her joyously," after "the moist breath of Zephyros had wafted her over the waves of the loud-moaning sea in soft foam" and bedecked her with garments and jewels, before bringing her to the gods.

Though not drawn with particular care, the scene is full of life, and the decoration as a whole makes an attractive pattern. It has been attributed by J. D. Beazley to the Wedding Painter (a contemporary of the Penthesileia Painter), called after the wedding he painted on a pyxis in the Louvre. The pot itself is expertly made, the lid fitting on its ledge with just the right leeway, and the foot neatly turned. The knob serving as the handle of the lid is missing and has been restored in plaster. The original one must have been broken off while the pot was in use and then reattached by a string, for on either side of the stem of the knob is an ancient hole, evidently bored through for this purpose. Another hole, started from the inside, was not completed, because it was too near the centre and was veering toward the stem.

A dainty Athenian cup in the form of a ram's head ¹⁶ (figs. 8, 9) is much smaller than these moulded vases are apt to be—a cocktail glass, so to speak, instead of a tumbler. Heads of rams were favorite forms for such vases, the pattern made by the curving horn against the soft, curly wool, and the gentle curves of the head evidently appealing. In ours the contrast between the red face and horns, the purple wool (rendered by pellets), and the shiny black neck with its white ivy wreath, is especially effective. The head itself is made from a two-piece mould—of which the joints can be clearly seen, especially on the inside—whereas the mouth of the vase is thrown and turned on the wheel. The cup may be dated in the second quarter of the fifth century from its close resemblance to an example in the British Museum with a scene by the Syriskos Painter.¹⁷

A large fragment of an Attic red-figured loutrophoros ¹⁸ (figs. 10, 11) is decorated with a battle scene instead of the customary funeral or wedding. Evidently this particular vase was set up to commemorate a soldier who died in battle. ¹⁹ The chief scene, of which a considerable part is preserved, was about twelve inches high and consisted of three Amazons combating four Greek soldiers. It has been attributed by J. D. Beazley to one of the companions of Polygnotos. ²⁰ Particularly fine is the Amazon queen mounted on her horse, spear in hand, a sword hanging by her side.

Cf. BMMA. xxxv, 1940, p. 38, fig. 5.

7. BMMA. xxxv, 1940, p. 38, ng. 5.

17 E 795; CVA. British Museum 4. III. I.c, pl. 41, 1 and pl. 42, 2; Beazley, AV., p. 160, no. 20.

¹⁹ For Battle-Loutrophoroi cf. Beazley, MJ. xxxiii, 1932, pp. 5 ff.; a list of those known (all fragmentary), is given on p. 15, note 15.

¹⁵ Stackelberg, *Gräber der Hellenen*, pl. XXXII. Nineteen cups and two pyxides—the one in the Louvre and ours—are attributed to this painter by J. D. Beazley in the second edition of his *Attic Red-figured Vase Painters*, now in press.

¹⁶ L. 4 in. (10.2 cm.). Put together from a number of fragments without restorations. Acc. no. 39.11.6.

 $^{^{18}}$ Ht., as restored, $18\frac{1}{4}$ in. (46.5 cm.). Besides the fragments of the body of the vase, which have been put together with plaster additions, parts of the mouth and neck are preserved (with white wavy line and red laurel wreath). Acc. no. 38.11.4. Cf. BMMA. xxxv, 1940, pp. 38 ff., fig. 3.

She wears the typical Oriental costume of tiara, long-sleeved tunic, sleeveless jacket, trousers, and shoes ²¹ (the tiara and shoes are covered with a purple wash). Though engaged in battle, she has the aristocratic bearing typical of the Pheidian period. Her opponent is drawn in three-quarter back view, with shield and white-crested helmet form ag effective silhouettes against the background. Behind him is another Greek, wielding a spear, and behind the queen is a second Amazon, on foot, with spear, bow, and quiver. Of the rest of the combatants only parts of the legs are preserved.



FIG. 12.—ATTIC SQUAT LEKYTHOS (Courtesy of the Metropolitan Museum of Art)

A red-figured Athenian squat lekythos 22 (fig. 12) has a delicately painted scene, again of a Greek and an Amazon, but here rendered with an individual touch. The Greek, wearing a chiton and a helmet and holding a spear and a shield with a large eye as a device, stands looking down at the Amazon, who is collapsing in front of him. She wears the Oriental costume of tiara, tunic, jacket, trousers, shoes; her quiver and bow are strapped by her side; her axe is falling from her limp hand. But why is he extending his right hand as if in grief and surprise - an unusual gesture in the turmoil of a battle? It suggests a special relation between the two. They must be Achilles and Penthesileia-Achilles suddenly aware of his love for the Amazon queen whom he has fatally wounded. Though this myth does not appear in extant classical literature before Roman times, there are indications that it was known

earlier,²³ and this surmise is borne out by the famous scene on the kylix in Munich ²⁴ – and now by our delicate, graphic picture.

GISELA M. A. RICHTER

THE METROPOLITAN MUSEUM OF ART

²¹ For discussions of such Oriental costumes on Athenian vases cf. Beazley, CVA. Oxford, 1, p. 2, no. 5; H. R. Smith, Menon Painter, p. 14, note 12; Gow, JHS. xlviii, 1928, pp. 144 ff.

²² Said to be from Sicily. Ht. 3½ in. (9.8 cm.). Neck chipped. Numerous red pits in the black-glazed parts have been tinted black. Some of the lines in the drawing have flaked off. Acc. no. 39.11.11. Cf. BMMA. xxxv, 1940, pp. 39 ff., fig. 6. J. D. Beazley associates our vase with three small pelikai which form "a group by one hand; the reverse is very like the Sabouroff painter, the obverse is in a tighter style that somewhat recalls the Trophy painter as well as the Sabouroff. They are Munich 2363, London E 417 and Goluchow 48."

²³ In Proklos' summary of the *Aethiopis*, Achilles kills Thersites because the latter had accused him of love for Penthesileia (cf. Rohde, *Gr. Roman*, p. 103, note 2; Bethe, *Homer* ii ², pp. 246 f.).

24 FR. 1, pl. 6.

GREEK VASES IN THE COLLECTION OF WASHINGTON UNIVERSITY IN ST. LOUIS

The vases in the collection of Washington University were brought together by the late Halsey C. Ives, Professor of Drawing at Washington University and first Director of the City Art Museum of St. Louis, so that they could be exhibited in the Louisiana Purchase Exposition held in St. Louis in 1904. At the close of the Exposition they were donated to the University and form one of its many valuable collections. They were bought with funds granted by the late Robert Brookings and Charles Parsons, with a view to illustrating some of the main aspects of Greek vasepainting. They are preserved in excellent condition and thus far have not been fully published. Shortly after the Exposition Furtwängler presented a list of these vases and of other classical works of art in American Museums to the Bavarian Academy in Munich, and since then some of them have been illustrated by different scholars.

We may begin our study with a description of the Corinthian pyxis No. 600, of Late Orientalizing style, illustrated in figures 1–4. It stands 13.5 cm. in height, is perfectly preserved, although broken in three pieces, and is made of the well known Corinthian yellowish clay. The lid (figs. 2, 4) does not belong to the vase, but apparently was taken from another pyxis similar to ours. The entire surface of the vase is covered with a thick red slip and on it the decoration is painted thickly in a brilliant black color, which, owing to uneven firing, has turned reddish-brown in places. Purple and white are also employed as accessory colors. The former is used in patches on the body, neck, face and legs of the figures, and especially on the wings of the birds, griffons and sirens. White is used in a beaded form over wings, for diadems and necklaces; in stripes on the wings and in solid patches in the palmette and lotus designs, and also in the tongue patterns. Incisions are used to mark the outlines of the hair, the division of wings, the ribs and the thigh, in regular Corinthian fashion. The use of all these colors and incisions on a red background gives the composition a brilliant and pleasant aspect.

The surface of the vase is arranged in well proportioned friezes, each of which is decorated with a different pattern. A row of triangles alternately reversed, enclosed in two thin black bands, forms the decoration on the lip. Black and accessory purple and white are used for this pattern. The rim is covered with a simple fret design, painted in black, purple and white, and placed between red and black lines. The neck of the pyxis is painted in a solid red color. On the shoulder we have the well known tongue pattern, with elements executed in black and white alternately, and below this a double band of dots enclosed in black lines. The main frieze, 4 cm. in width, is decorated with a colorful array of mythical and real animals and birds. A lotus-palmette ornament flanked by two long-necked water-birds,

¹ Bulletin of the City Art Museum of St. Louis vii, January 1922, pp. 2 ff.; Furtwängler, in SBayA. 1905, pp. 242 ff.; H. Payne, Necrocorinthia, Oxford, 1931, pp. 322, 326 and pls. 35, 1, 4; 42, 2, 3. The vases are now exhibited in the City Art Museum of St. Louis. For permission to publish these vases I am grateful to Chancellor George R. Throop of Washington University. I want also to express my thanks to Director M. Rodgers and the Museum Staff for facilities rendered in my study of the vases.

heraldically placed, perhaps forms the central pattern (fig. 1). On either side of the birds are seated two lions with heads turned backward, thus introducing the other two members of the composition. These consist of a siren with outspread wings standing between two seated sphinxes (figs. 2 and 4), and a siren standing between two seated griffon-birds (figs. 3 and 4).² The background is strewn with rosettes, dots and concentric circles. The tails of the sphinxes, lions and griffons form interesting curvilinear patterns, which fill the space below the ornamental wings of the figures. The composition fills the frieze in an easy and well balanced way, the movement going from figure to figure, and each figure is treated in a lively and decorative fashion and in the characteristic Corinthian manner. The black, purple and white colors as well as the incised details of body, wings and feathers projected against a red ground, enhance considerably the decorative effect of the forms and of the entire composition. A broad band, painted in reddish-black color, and a narrow frieze of rays complete the decoration of the body. The foot is painted red.

The handles are in the form of female heads, which rise above the rim. They exhibit carefully modelled oval faces, a well rounded but not too heavy chin, a stolid mouth, well proportioned nose, and eyes placed correctly below a high triangular forehead. The ears are painted too high and behind them the hair falls in wavy strands. The heads possess a well pronounced profile and have lost the flatness usual in similar terracottas of the Daedalic and post-Daedalic periods.³ Solid brown-black paint is applied in a rather archaic manner over the hair, with the exception of a band reserved over the forehead, and is used to indicate the eyes, the eyebrows, the lips, a necklace, and the dress covering the upper part of the bust. The face is not covered by the red slip but is left in the yellow of the clay.

The description of the vase makes it clear that it belongs to the Corinthian group of red-ground vases of the later Orientalizing style, so ably described by Payne.⁴ It is, however, one of the best examples of this variety and of the Late Corinthian pyxides, which usually are decorated in a slovenly and crude manner. The excellent workmanship of our example, the neat drawings, the sensitive use of line and color and the careful modelling of the heads will easily prove its superiority over other examples of this style. Its decoration will place our pyxis at the beginning of the second quarter of the sixth century, and this date is also indicated by the modelling of the heads which serve as handles.

Equally interesting and perhaps more important than the pyxis is a late Corinthian oenochoë illustrated in figs. 5–7. It stands 17.8 cm. in height. The shape is very uncommon in Corinthian pottery and our vase is one of the earlier historic examples of the shape—the beaked oenochoë. It recalls very strongly the Late Helladic jug

³ Thus the figures arranged in a flat band would be in the following order: lion, water-bird, lotus-palmette, water-bird, lion, sphinx, siren, sphinx, griffon, siren, griffon. Noticeable is the use of each of these figures twice.

³ Cf. Jenkins, Dedalica, Cambridge, 1936, pls. vi-vii. For such plastic heads on Corinthian vases, cf. Payne, op. cit., pl. 48. Plastic heads and busts are not uncommon in vases produced in other workshops. Cf. Laconian workshop: BSA. 1934, p. 36; AO. pp. 95, 98, fig. 70g, pls. 7–8. Attic: CVA. Louvre, Fasc. 6, III He, pl. 61, 3; Cambridge, 2, III H, pl. III 1c.; U. of California, 1, pls. III H, XVII, 3b. Clazomenae: Sieveking-Hackl, Kgl. Vasen zu München, pl. 20; Chios: Kourouniotes, Δελτ. 1916, pl. 3, figs. 20–21.

4 Op. cit., pp. 58 ff.; Payne, op. cit., p. 322, places the heads not much earlier than 560 B.C.



Fig. 1.—Late Orientalizing Corinthian Pyxis No. 600 (Front)



Fig. 2.-Pyxis No. 600 (Back)



Fig. 3.-Pyxis No. 600 (Side)



Fig. 4.-Pyxis No. 600 (Side)

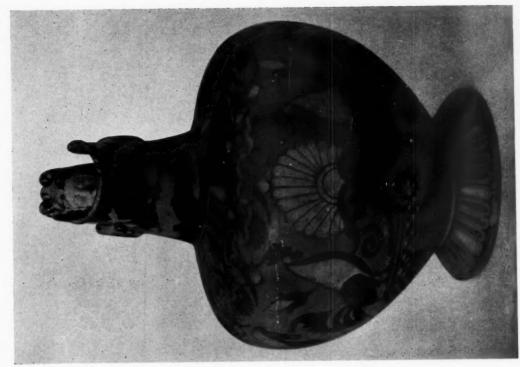
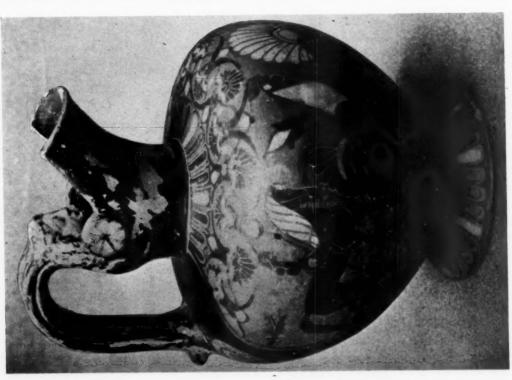


Fig. 6. - Beaked Oenochoë (Front)



Pig. 5. – Beaked Oenochoë of Late Orientalizing Corinthian Style (Side)

found by Blegen at Korakou,⁵ but apparently it was not influenced by its remote prehistoric ancestor, but by a contemporary vase executed in metal. Its beaked spout, its ribbed high handle with plastic decoration at the point where it meets the rim, the discs at the side of the spout, and the sharply slanting foot clearly indicate that the potter is imitating a metallic original. And, in fact, Payne illustrates a metal oenochoë of an earlier period, which resembles our example in many particulars.⁶

The entire surface of the vase is covered either by glaze paint or by a reddish slip over the yellowish clay. The painted decoration is comparatively well preserved; a few patches of paint have flaked off, especially from parts where a solid coat was applied to the surface, e.g. parts of the neck and handle. The decoration is applied in a predetermined scheme, which is carried out in a very artistic manner. The main decoration is placed in a broad frieze, 5.5 cm. in width, covering about three-fourths of the surface of the body. Thus a large metope is formed at the back of the vase and this is covered with a solid black (to reddish-brown) glaze and is decorated by a bracket-palmette painted in white, with line details in reddish-brown (fig. 7). This

motive springs from the base of the triple handle and recalls very strongly the serpent motive found in a number of bronze vases of the period.7 In the main composition (figs. 5, 6) we find suspended from an incised circle immediately below the neck a band decorated with a tongue pattern, in white color alternating rhythmically with black. Then follows a chain of alternately reversed lotus and palmette ornaments. White again is used in painting the lotus bud and the palmette ribbons, while incisions are employed in rendering details of the palmette itself. Below this ornamental band we have the main composition. Its central theme is formed by two cocks standing in heraldic fashion on either side of a lotus-palmette ornament (fig. 6). The cocks with their white necks, fan-shaped tails, and erect and proud bearing are typical of the late Corinthian period. With the lotus-pal-



FIG. 7. - BEAKED OENOCHOË (BACK)

mette they form a decorative central group, on either side of which is painted a youth

⁵ C. W. Blegen, Korakou, fig. 69.

⁶ Op. cit., pls. 45, 1-2, 6, and 48, 10; RM. 1923-24, p. 351 and figs. 6-8.

⁷ See Neugebauer in RM. 1923-24, p. 390 on the snake motive; Payne, op. cit., fig. 98. This snake motive is not only usual on Corinthian vases, but also on those belonging to Laconian workshops. Cf. L. Polites, in Έφ. 1936, pp. 150 ff.

riding on a horse, a motive very common on Corinthian vases. The greater part of the composition is painted in a brilliant black paint, in places shading off to reddishbrown, owing to uneven firing, but white is profusely used for the painting of the palmette, the buds, the body and feathers of the cocks, their ear-lobes, and the manes of the horses. Purple is also employed, though more sparingly, as an accessory color, placed in patches over the body of the riders and horses, on the body and feathers of the cocks and on their combs and wattles. Incised lines outline the forms and render details of the feathers, body, legs and tails of animals and birds. A band of dots, in black and white, and one of rays carried completely around the bottom of the vase complete the decoration of the body. The foot is covered with a tongue pattern in black and white. The neck, spout, and handle are solidly coated with black paint. The handle is attached to the body and rim of the vase in a manner characteristic of metalwork: a head is carefully modelled and placed over the rim, at the point where the handle joins it (fig. 5). It is of an advanced type and could be compared to those on pyxis No. 600 described above. Color has been applied over the hair and was originally used to indicate the eyebrows, eyes and lips.

The artistic merit of this vase is apparent. It can be easily accepted as one of the better conceived and decorated vases of the Late Corinthian style. The use of brilliant black to reddish-brown paint against a red ground, the abundant employment of white, the discriminate touching of details in purple and the accentuation of form and detail by incision result in a very pleasing and almost gay effect, more often connected with the East Greek style. Typical Corinthian motives and treatment, however, prove beyond doubt its Corinthian origin. The date of the vase can be determined with a sufficient degree of accuracy from its ornament and from the plastic decoration. These elements indicate that it belongs to the second quarter of the sixth century. Because of its artistic merit and the comparative rarity of form, this vase is the most valuable in the collection. The oenochoë follows closely the metallic prototype after which it was fashioned and consequently reflects the work and the art not only of the Corinthian potter, but also that of the metal worker, and since we possess but few documented examples of the work of the latter, the additional information furnished by the oenochoë is of considerable value. 10

The black-figured style is represented by a number of well preserved vases, the most interesting of which is the amphora No. 668 (figs. 8–10). It is reported to have been found at Orbetello in 1888, and was purchased in Rome in 1898. It stands 41.5 cm. in height and exhibits an echinus-shaped lip, slightly concave tall neck, offset from the body by a well defined ring, body higher than it is wide, a torus foot separated from the body by a ring, and "triple" handles. Its lid is crowned by a globular knob. It is of the standard "Ha type" of amphora, common during the later period of the black-figured style. 11 As usual the decoration covers the lid, the neck and

⁸ For the motive of the cock cf. Payne, op. cit., figs. 20 and 21 and page 76 (note); for that of the horse and rider, ibid., pp. 70 ff. and figs. 17–19 bis.

⁹ Payne, op. cit., p. 326.

¹⁰ The work of the Corinthian metal workshops, and especially its sculpture, is still very little known. Cf. Payne, op. cit., p. 210 ff. and especially pp. 232 ff.

¹¹ G. M. A. Richter and M. J. Milne, Shapes and Names of Athenian Vases, p. 4.



Fig. 8.—The Cerberus Amphora No. 668





FIG. 9. - THE CERBERUS AMPHORA. DETAIL

Fig. 10. — Cerberus Amphora (Back). Theseus Struggling with the Minotauth

the body of the vase. Solid color is placed over the knob of the lid, over the lip, handles and foot (fig. 8). A series of concentric circles forms the decoration of the lid. ending in a fret pattern. Addorsed palmettes cover the neck, and the usual tongue pattern is placed around the shoulder and below the ridge at the base of the neck. Purple is used alternately with black in this pattern. Below the main frieze of figures we find a band with a single meander pattern, followed by one with lotus-bud chain and finally a ray pattern placed around the bottom. The foot is covered with solid black glaze. The main decoration, placed around the body of the vase, consists of two figured compositions, separated from each other by a quadruple palmette and bud design: Theseus struggling against the Minotaur and Herakles in his exploit with Cerberus. The frieze is 18 cm. wide.

Theseus, a beardless youth with long hair bound up with a fillet, wears a short chiton and a sword. He is shown attacking the Minotaur, represented as a bullheaded human figure with a long tail (fig. 10). The hero holds the monster by the wrists and apparently is on the point of turning him over on his back. He seems confident if not sure of the outcome of the struggle, which is further suggested by the attitude of the monster whose feet are almost lifted from the ground. Two figures in long chitons and himatia, placed on either side of the central group, their hands extended below their himatia, follow the conflict. Such companion figures are common in the representation of the story on black-figured vases and perhaps symbolize the tribute of Athenian youths and maidens brought to Crete by Theseus. Usually the face, hands and feet of the maidens are painted in white, but there are examples in which both male and female figures are painted in black.12 It seems that in our composition we have a maiden at the right and a youth at the left of the contesting figures. The youth, especially, with his position and his carefully draped his mation, recalls the gymnasts and judges so commonly represented in athletic scenes and perhaps in them we can see a definite influence of those athletic themes on the representation of our mythological event. A further influence is apparent in the way Theseus is wrestling with the monster. As a rule in representations of this exploit, Theseus attacks with his sword the monster who attempts to flee. 13 In our vase he is depicted as a wrestler facing a fighting monster who stands his ground with determination and without fear. The only other example that I could find of such a hand-tohand fight between Theseus and the monster is painted in the tondo of a blackfigured kylix from Rhodes.14 The ground of the kylix perhaps was too small to allow the usual representation of Theseus with his sword, but on our vase the change was deliberate. It can perhaps be assumed that the artist changed the typical rendering of the event under the influence of representations of the exploits of Herakles. Such a "contamination" of the type and of the theme of Theseus and his exploits has

¹² Cf. CVA. British Mus., fasc. 3, III He, pl. 45, 8a; Louvre, fasc. 4, III He, pl. 46, 8. Bruxelles, 1, III He, pl. 11, 2a, etc.

13 Theseus thrusting his sword into the neck of the monster facing him is represented on a blackfigured amphora in the National Museum of Madrid, CVA, Madrid, Musée Arch, Nat. 1, III Hd., pl. 2, 3a and on a black-figured hydria in the Boston Museum of Fine Arts. For Theseus attacking the monster with a spear cf. E. Pfuhl, MuZ. iii, fig. 224.

¹⁴ CVA. Rodi 1, III He, pls. 16, 2 and 17, 3. In all I was able to collect thirty-three representations of

this exploit.

been noted before.¹⁵ At any rate this deviation from the crystallized type helps to increase the dramatic effect of the struggle and to set in bold relief the value and prowess of the hero.

The composition is lively and spirited, but it is carried out in a rather careless way, which seems to indicate that it is of secondary importance. Especially the incised details, apparent in the picture, are almost crudely rendered and the lines as a rule are deep, broad and careless. In representing Theseus the artist employed the usual archaic type of figure in profile with torso in full front view, but in drawing the Minotaur he attempts a three-quarter view of the torso, as is indicated by the breast line and the lines of the abdominal area.

Herakles' exploit with Cerberus, which apparently forms the main figured theme of the frieze, is of greater interest. The bearded hero is represented at the extreme left of the composition (fig. 9), wearing his lion-skin over a short chiton, holding his club with his right hand, which is hidden behind the body of his companion, and extending his left hand in an eager gesture toward Cerberus who is approaching. From his waist is suspended a box-shaped object, a *pharetra*, from which issues an object that can hardly be identified, perhaps his bow. Immediately in front of the hero we find his companion Hermes. The bearded god, wearing his conical petasos, a heavy himation, a long chiton, and his winged sandals, is bending forward and has extended his left hand toward Cerberus in an expressive gesture, the apparent purpose of which is to appease and quiet the fierce dog. In his right hand he holds a long staff, instead of his kerykeion. It is evident that he is going to make Herakles' work easier, and that the abduction of the dog will be effected by strategy rather than by force.

Cerberus is represented as a two-headed mastiff who approaches Hermes quietly.

In spite of its two heads and rugged hair, it seems to be a tame animal and does not even suggest the monstrous offspring of Echidna and Typhon. We can scarcely see in him

Κέρβερον ώμηστήν, 'Αίδεω κύνα χαλκεόφωνον, πεντηκοντακέφαλον, ἀναιδέα τε κρατερόν τε.¹⁹

But perhaps Cerberus' submissive mood is part of the trick, so strikingly explained by Hesiod (*Theog.* 769 ff.)

¹⁵ Cf. Smith in text to CVA., University of California 1, III H, pl. XX, 3; O. Wulff, Theseussage, p. 33, note 26: "Minotaur clubbed!!"

¹⁶ Hermes' contribution to the exploit is generally acknowledged by the vase-painters. On a black-figured oenochoë in the Bibliothèque Nationale, the god leads Cerberus away from the lower world. Cf. CVA. Bibl. Nat. 2, III He, 65, 6, 7, 8. Athena, not pictured in our example, accompanies the hero in a number of the representations. In one of them, Gerhard, AV. ii, 309, she is holding Cerberus.

¹⁷ He is holding his kerykeion in the black-figured amphora in the British Museum, CVA. Br. Mus., fasc. 3, III He, pl. 34, 3a and JHS., xviii, 1898, p. 294, fig. 6. Cf. CVA. Louvre 4, III He, pl. 29, 4; Gerhard, AV. ii, 129; 130, 131, 40, etc.

¹⁸ This is the most common representation of Cerberus on black-figured vases. Cf. Walters in JHS. xviii, 1898, pp. 296–297, where a list of vases bearing the exploit is given.

¹⁹ Hesiod, Theogony, 311 ff. In Pindar, frag. 249 (Bergk) he is given a hundred heads. Horace, Carm. ii, 13, 34, calls him "belua centiceps." But he is τρικάρηνος or τρίκρανος in the tragedians. Cf. Luk. Philop.; Eurip., Herc. Fur., 611, 1277 (cf. Seneca, Herc. Fur., 784 ff.), and Soph., Trach., 1098.

..... δεινός δὲ κύων προπάροιθι φυλάσσει νηλειής, τέχνην δὲ κακὴν ἔχει ἐς μὲν ἰόντας σαίνει ὁμῶς οὐρῆ τε καὶ οὕασιν ἀμφοτέροισιν, ἐξελθεῖν δ'οὐκ αὖτις ἐᾳ πάλιν, ἀλλὰ δοκεύων ἐσθίει, ὄν κε λάβησι πυλέων ἔκτοσθεν ἰόντα.

Beside Cerberus are standing a man and a woman, who can be identified as the lords of the nether world, Pluto and Persephone. Pluto is wearing a long chiton and a himation, extends his right hand in a gesture of greeting to his guest, and holds in his left a long staff similar to that held by Hermes. Persephone also wears a long chiton and a heavy himation, one end of which she has thrown over her shoulder. She holds her right hand aloft in greeting and with her extended left hand points to Cerberus, the object of the quest. It is interesting to remark that Pluto is drawn in an unnatural and twisted pose: his body is turned towards Hermes and Herakles, while his feet turned in the other direction indicate his fear of Herakles and his strong desire to run away. This attitude of Pluto towards Herakles can be easily understood when we recall the tradition, preserved by Homer, Iliad v, 395 ff., of a battle between the lord of the nether world and the powerful hero. Herakles was not only able to stand against Pluto, but even wounded the god: ἐν Πύλω ἐν νεκύεσσι βαλών.20 Pluto, therefore, had cause to fear this wild man now come down to his very domain, and indeed was willing to let him carry away his watch-dog. In later years, Pindar in his ninth Olympian ode (44 ff.) mentions this battle and adds that Poseidon and Apollo were also there helping Pluto. Pindar's passage is instructive because among other things it tells us that the staff was the characteristic weapon of Pluto. By means of this staff Hades: Βρότεα σώμαθ' ἄ κατάγει | κοίλαν πρὸς άγυιὰν θυασκόντων (34-35). Pluto is represented holding this staff in our composition, and apparently Hermes has exchanged his kerykeion for the long staff of Hades as more effective against the stray "mortal corpses."

Over the heads of the hero and of the gods the inscription TIMO Θ EO $\frac{1}{4}$ KA ν O $\frac{1}{4}$ is painted in black—a kalos name known from two other black-figured amphorae.

The free use of incision is apparent in the illustration. Incised lines are employed mainly to render details of drapery and anatomy, and also to depict the outline of members projected against other painted parts. White is used in the painting of the hair of Cerberus, the face, hands and feet of Persephone, and as usual it is applied over the black glaze. Purple is used sparingly in the painting of the mantles of Hermes and Pluto. The use of these accessory colors, and of the incised lines give to the composition a very pleasant effect. In design this composition is very successful. It is naturally and gracefully applied on the decorated surface with due reference to the structural lines of the amphora it decorates.

²⁰ Recently Rose, Handbook of Greek Mythology, p. 215, following Aristarchos (schol. to Il. v, 395 ff.) accepts $\pi \dot{\nu} \lambda \phi$ to mean $\pi \dot{\nu} \lambda \eta$ or gate and so prefers to read "in the Gate among the dead." I believe that Pindar's passage, as above, serves to indicate, if it does not prove, that in the early fifth century the tradition that the battle took place at Pylos was current.

²¹ Klein Die Griechischen Vasen mit Lieblingsinschriften, p. 36, and Robinson-Fluck, A Study of Greek Love-Names, p. 187. For this inscription cf. L. Pollak, "Neue Beiträge zu den Meistersignaturen und Lieblingsinschriften," RM. 13, 1898, pp. 85 and 86.

The capture and bringing of Cerberus from the lower world, one of the last exploits of Herakles, signifying perhaps his conquest over death,²² although not so commonly represented as his killing of the Nemean lion, is still a common theme in black-figured compositions. Walters has listed thirty-six vases on which this theme occurs, and to these must be added at least seven more now in the museums of Naples, Paris, Boston and St. Louis.²³ These numerous examples seem to indicate the appeal of this myth to the minds of the vase-painters of the early period.

Apparently the tale is an old one, as the bringing of Cerberus to the upper world was known to Homer,²⁴ and it seems to be safe to assume that its origins go well into the prehistoric age. Sir Arthur Evans has already pointed out that perhaps Cerberus is depicted on various works of art from the Minoan world. The most striking example of such possible representation is to be found on the so-called Ring of Nestor. 25 A single-headed dog, represented crouching at the foot of the "World Tree" can be identified in all probability with Cerberus of the historic period. Dog-guardians of the Cretan Goddess are to be seen in many other representations carved on gems, 26 but perhaps the most interesting example is to be found on a "chalcedony bead-seal" from Tomb I at Isopata.²⁷ A dog of colossal size wearing an embossed collar is represented on the seal and behind it are standing two male figures. The desire of the artist to indicate that this is not a common dog is suggested by the type of head which he gives to the animal. Evans remarks that "its head might rather be taken for that of a lion, but its tail is certainly a dog's." It is interesting to remark that in the representation of the "athlos" on Greek vases, Herakles is commonly accompanied by Hermes, Athena, or Iolaos. Can we see in this composition a Minoan version of the "athlos," with the hero and a friend or a god bringing back the guardian dog of the lower world? Of course it cannot definitely be proved that the monster on the seal is Cerberus, but its appearance seems to indicate that it is not a regular dog and consequently its attendants are not mere hunters. The fact that the monster is represented with one head cannot be held against this identification, because Cerberus is represented with one head on our earliest representation of the "athlos" on a Corinthian skyphos from Argos.²⁸ Indeed Cerberus as a three-headed monster, corresponding to the many heads known to Hesiod, is a comparatively rare motif. Out of 36 representations listed by Walters, 31 examples represent the monster with

²² Rose, op. cit., p. 215; M. Nilsson, The Mycenaean Origin of Greek Mythology, p. 214.

²³ Cf. CVA. Louvre, fasc. 3, III He, pl. 14, 7; fasc. 4, III He, pls. 43, 1 and 47, 6; Bibliothèque Nationale, fasc. 2, pl. 65, 6, 7, 8; Naples, from Vulci, under provisional number 20 in the Nuova Sala. The Boston b.-f. hydria is from the Peake Collection.

²⁴ II. viii, 368; Od. xi, 623. Indeed this is the only exploit of Herakles mentioned by Homer. Cf. Nilsson, op. cit., p. 197.
²⁵ Sir Arthur Evans, JHS. 1925, p. 52.

²⁶ Evans, PM. ii, pp. 764 ff. Of course representations of dogs racing after wild animals are also common in Minoan works of art. (Cf. PM. iv, p. 524, fig. 470, but the sacred character and rôle of some of the dogs represented seems to be established. Cf. Evans, op. cit., ii, p. 765 and iv, p. 608 and fig. 597 Ag. In a similar way the motif of the lion was employed sometimes with religious meaning: Evans, op. cit., ii, p. 809, fig. 528, p. 831, figs. 546-548, etc., and at other times without any religious implication, iv, p. 545, figs. 500-503b).

²⁷ Cf. Sir Arthur Evans, Tomb of the Double Axes, p. 9, fig. 14; PM. ii, p. 766 and fig. 496.

²⁸ Roscher, Kerberos ii, p. 1122, fig. 1; AZ. 1859, pl. 125. Note that in this representation of the "athlos" Pluto is represented running away from the scene. His fears are more subtly rendered elsewhere and in our representation.

two heads and only four examples give it three. Among the latter are two Caeretan hydriae.²⁹ This seems to indicate that only as time went on were additional heads given to the monster and, therefore, the one-headed monster of Minoan times could very well be the original from which the historic type developed. The fact that we have a three-headed Cerberus on Caeretan hydriae ³⁰ of early date may indicate that this multiplicity of elements was introduced in the archaic period from the Orient. But if the above reasoning is correct the monster itself was created in Greece proper and its myth was locally developed and not imported from the Orient. As is well known, the latter is maintained commonly by scholars, who base their conclusion on the many heads of Cerberus and on the multiplicity of elements so characteristic of Oriental art.

It is apparent from the figured compositions that our vase belongs to the later phase of the black-figured style and perhaps to the third quarter of the sixth century. The way in which the figures are rendered, the incised details, especially the folds of Hermes' chiton, which recall so strongly the mantles of the Maidens of the Acropolis, definitely prove the late date of the vase. The kalos inscription does not help us very much in the dating, since the letters are of the general archaic type.

Another tale, and a more popular one with vase-painters, is pictured on the lekythos No. 677, figs. 11-13, the myth of the killing of the Nemean lion. Herakles, accompanied by Hermes, is represented attacking the lion, which is standing in front of its cave.31 The vigorous figure of the bearded hero (fig. 11), placed at the center of the composition, dominates the scene, which is spread with ease on the curving surface of the vase. He is moving forward vigorously, brandishing his heavy club over his head and holding his bow and arrow in his extended left hand. His pharetra is suspended by means of two leather straps over his back. The movement of the figure as well as the successfully balanced strong torso is very interestingly represented. The wide opening of the legs and the diagonal of the body give to the figure a lively buoyancy and suggest excellently the prowess of the hero and his eagerness and confidence in the outcome. Behind the hero stands Hermes wearing his winged petasos and boots, a short chiton and a voluminous himation, one end of which is thrown over his right shoulder, while the other hangs over his left arm (fig. 12). The god has turned his head backwards and has joined his hands in front of his chest. The eager look of the god and the position of his hands, give the figure an air of apprehension and worry, that throws in higher relief the determined attitude of the hero. This worrying seems strange for a god who must have known the outcome of the conflict before it had even started, but can be understood if we point out that perhaps the god here is replacing a mortal figure, a companion of Herakles, whom we see represented on other vases. For instance on the well known amphora of Exekias now in Berlin, the place of Hermes is taken by Iolaos, who desperately wrings his hands in front of him. Our painter, with an eye for decorative effect, has replaced the plain figure of Iolaos with the more colorful character of Hermes.³²

²⁹ Walters, op. cit., p. 296.

²⁰ Cf. MonAnt. vi, p. 36; E. Buschor, Greek Vase Painting, pl. XLIII, fig. 81.

 $^{^{31}}$ A cursory survey of the CVA, and European collections has yielded more than 74 examples of this theme in black-figured examples alone and doubtless more are to be found.

²² Cf. Pfuhl, MuZ. iii, fig. 227. As a rule Iolaos and Athena are the companions of the hero in this



Fig. 13, - Lekythos No. 677. Nemean Lion in Front of Its Cave

The lion was surprised in front of its cave, while it was ready to devour a lifeless fawn stretched below its heavy front paw (fig. 13). The beast does not like the intrusion and expresses its rage by a wide open mouth and the raising of its front right paw in a rather grotesque manner. In spite of its spirited appearance the figure of the lion lacks the ferocity associated with it in the tale, and is rather a pattern of great decorative quality but of little strength. We could contrast it, for instance, with the well known lion coming out of the thicket to attack its hunter, carved by an Assyrian artist on an alabaster slab which once decorated the palace walls at Kuyunjik, and is now in the British Museum.³³ The Assyrian was able to portray the strength and rage of the animal in a forceful way; we can see a real lion forboding evil to its hunters. Our painter, who is apparently influenced by Oriental works of the type illustrated in the relief, seems to be interested only in the decorative possibilities of the motive. This is further indicated by the way in which he brings out the details of the legs, face and mane by means of decorative lines.

The rear half of the lion's body is hidden by the towering rock which forms the entrance to its cave, and which is drawn in a way familiar to us from other black-figured compositions. This representation of the Nemean lion emerging from a cave is very rare if not unique in black-figured compositions. Usually Herakles is represented struggling with the animal and sometimes advancing against it. On a black-figured amphora in the Louvre, the cave is perhaps represented at the extreme left of the representation, but the lion is in the open where the struggle is depicted as taking place. The only other representation of the Nemean lion emerging from his cave that I was able to find is to be seen on a red-figured vase in the collection of the University of Thessaloniki from the excavations of Professor K. Rhomaios at the small Karabournou. We cannot of course determine whether our artist introduced this innovation in the traditional rendering of the theme, but we can concede that he was able to make use of it in a very interesting and artistic way. The background is further decorated with leafy boughs which seem to spring from the rocks of the cave and from behind Hermes.

Incised lines, used for details apparent in the pictures, are drawn in a vigorous and decorative way. White color is used only for the details of the mane of the lion. The black color employed throughout is of a brilliant and warm tone. The effect of the entire composition is very decorative. An ornament of running palmettes is

[&]quot;athlos": cf. CVA. Br. Mus. 6, III He, pls. 74, 4; 75, 2; 78, 1; 82, 3; fasc. 3, pl. 27, 3a; fasc. 4, pl. 52, 2c; pl. 53, 1b; pl. 57, 2a, etc.; Louvre, fasc. 4, III He, pl. 35, 10; pl. 46, 1; pl. 46, 3, 4; Bibl. Nat., fasc. 1, pl. 35, 3 and 5; pl. 42, 1, 3; Villa Giulia, fasc. 2, III 1c, pl. 15, 1, 3; III He, pl. 10, 1–2; etc. In a few cases we find Hermes and Athena present in the contest: cf. Br. Mus., fasc. 6, III He, pl. 76, 4; pl. 76, 3. Iolaos and Hermes are seen on the b.-f. amphora in the Villa Giulia: CVA. fasc. 1, III He, pl. 1, 3. Iolaos, Hermes and Athena are represented on the b.-f. amphora in the Louvre, CVA. fasc. 4, III He, pl. 40, 6. Sometimes youths, recalling the gymnasts, are attending the contest: cf. CVA. Louvre, fasc. 3, III He, pl. 10, 2, 5; University of California, fasc. 1, III H, pl. XXVII, 4; Rodi, fasc. 1, III He, pl. 13, 3.

³³ Perrot and Chipiez ii, p. 156, fig. 78; British Museum, Assyrian Room No. 109. For the Assyrian origin of the Corinthian lions, cf. Payne, op. cit., p. 69.

³⁴ Cf. CVA. Br. Mus., fasc. 4, pl. 56, 3a; fasc. 6, pl. 84, 4, etc.; Pfuhl, op. cit., iii, figs. 283, 284, especially 289, 292, etc.; M. H. Swindler, Ancient Painting, pp. 129 ff. and figs. 215, 219, 256.

¹⁵ CVA. Louvre, fasc. 3, III He, pl. 27, 7; Pfuhl, op. cit., iii, fig. 289.

³⁶ The vase is pictured in the Πανηγυρικόν τεῦχος τῆς Ἐπετηρίδος of the University.



Fig. 14. - Black-Figured Kylix No. 673



Fig. 15. - Black-Figured Kylix No. 673. Detail



Fig. 18.—Two-Handled Cup No. 669

placed on the shoulder of the vase, while a border of dots and stripes emphasizes the joining of neck and shoulder. The surface of the vase below the handle is left undecorated. The bottom, base and rim of the lekythos are covered with solid black glaze.

The date of the vase can be determined with great probability. The elaboration of the figures, the incised details, especially of the chiton of Hermes, the note of elegance, the sophistication of the artist and his constant effort toward decorative effects place the lekythos in the closing years of the black-figured period and perhaps at the end of the third quarter of the sixth century. The lekythos can be placed among

fine examples of the black-figured style.

Somewhat earlier in date is the kylix No. 673, illustrated in figures 14-16. It belongs to type I,²⁷ with offset lip, emphasized by a heavy black line, and offset stem, and is perfectly preserved. It stands 14 cm. in height and the diameter measures 25 cm. The fields between the handles are decorated with similar compositions, which are spread over the entire surface of the vase, and which represent the traditional duel of two heroes attended by their grooms and friends. The two heroes are the center of the composition and of the interest. They oppose each other with spear and shield and are represented wearing Corinthian helmets. On either side is depicted a youth holding a spear in one hand and in the other the reins of a horse towards which he is moving. Both turn their heads towards the contestants. Over their shoulders they bear two chitons, represented in white and purple colors; one of these apparently belongs to the fighting hoplites. The horses are represented in full front view, with heads turned in profile, in a naïve but very decorative way. The effect is increased by the purple color which is applied to their manes and by the definite, almost sharp incision which depicts details of head, neck, body and legs (fig. 15).

The motive of horses represented in front view, either singly or paired in a chariot, enjoyed great popularity during the sixth century. We find it not only on Chalcidian, Attic and East Ionic vases, as de Ridder maintains, but also on Corinthian vases, on reliefs of Corinthian origin, and on "Argive-Corinthian" bronzes. It would be difficult to prove where it originated, but it is certain that Corinth cannot be excluded from the possible candidates. Beyond the horses are standing two elderly bearded figures dressed in long white chitons and voluminous black and purple himatia, holding spears in their hands (fig. 15). They show little excitement or worry over the outcome of the combat and seem to fill the rôle of an umpire in a game held in a palaestra rather than that of devoted friends and companions. Perhaps they were borrowed from athletic contests, usual in vase-decoration of the sixth century.

In the interior of the cup, in the tondo, we find the representation of a chimaera, framed in a double border of dots and leaves, limited by lines (fig. 16). Purple, red, and black are used for the representation of the mythical beast, while details of body and head are further rendered by incisions. The chimaera with its lion head and body,

37 Richter-Milne, op. cit., p. 25.

³⁸ De Ectypis, p. 69; Payne, op. cit., pp. 70 ff. and 74, notes 4 and 6, Vases Nos. 994, 1148, 1181B, 1412; Cf. AntDenk. ii, pls. 39, 1b; 29, 23 and AM. 1916, pp. 45 ff.



Fig. 16.—Chimaera in Tondo of Kylix No. 673



Fig. 17.-Little-Master Kylix No. 664

its additional head and front part of a goat rising from the back of the lion, and its short stubby tail, which apparently is meant to suggest its serpentine nature, is perfectly placed within the round space which it decorates. Indeed it is a spirited and decorative chimaera, much superior as a pattern to the one painted by Eucheiros in the tondo of another kylix now in the British Museum.²⁰

In spite of the black line and ridge which bisect the figures, the main composition is very effective and decorative. The good black glaze, the use of white and purple, apparent in the pictures, and the discriminate but effective use of incised lines, give it a colorful and decorative effect. Again the light ground on which the figures are painted contrasts strongly with the brilliant black surfaces of the bottom, stem and handles. Our vase is a typical, good example of its class and can be placed early in the third quarter of the sixth century.

The so-called Little-Master cups are represented by a well preserved example, kylix No. 664 (fig. 17). It stands 13 cm. in height and the diameter measures 21 cm. A band, 3 cm. in height, is reserved on the handle zone of the cup for the frieze decoration. The rest of the vase, separated as usual by reserved lines in three areas, is covered with black glaze. A swan flanked by cocks forms the figured decoration of each side of the frieze. The regular palmettes, painted in black glaze on either side of the handles, complete the decoration. Purple and white for accessories and incisions are employed to emphasize details. It will be interesting to compare the cocks on the cup with those painted by Corinthian artists, which apparently formed the prototypes of the Attic examples.⁴⁰

With the black-figured vases must be included the two-handled cup No. 669 illustrated in fig. 18, p. 202.41 It is perfectly preserved and stands to a height of 17.50 cm. Its body is modelled in the form of a negress' head. On its neck a wreath of leaves' is painted in white against the black glaze which covers the surface of the vase. The features of the face are well modelled, with the broad nose, bulging high cheeks, thick lips, and pronounced prognathism rendered in a natural way characteristic of a negress. The hair, which at the back is collected in a kerchief, frames the features of the face in front and its curly nature is indicated by incised parallel, undulating lines. The ridges of the eyebrows are emphasized by dull white color with which the white of the eye is also covered. The eye has an elongated almond shape and the

40 Cf. above, p. 191 and Payne, op. cit., figs. 20 and 21, and page 76, note.

³⁹ CVA. Brit. Mus., 2, III He, pl. 11, 1a; Hoppin, A Handbook of Greek Black-figured Vases, p. 86; J. D. Beazley, Attic Black-Figure, pl. 5, 2; etc. The creature was fully described by Hesiod, Theogony, 319 ff. and Homer, II. vi 180 ff. For the motive in art cf. Payne, op. cit., p. 90, note 5 and Malten, "Bellerophontes" in JdI. 1925, pp. 121 ff. The myth is an old one and it seems that we have evidence proving its existence in prehistoric times. Persson recognized the beast on a glass plaque found in Dendra (The Royal Tomb at Dendra, pp. 64 ff.). His conclusions were accepted by Wilamowitz (Der Glaube der Hellenen i, pp. 121 ff.) and by Nilsson (The Mycenaean Origin of Greek Mythology, p. 33) who maintained that the chimaera tradition existed in prehistoric times. Lately Dr. Anna Roes cast doubt on these conclusions, seeing on the same plaque instead of a chimaera a goat jumping behind a lion, with hind legs in the air, recognized as the goat's head turned backwards, and with front feet touching the ground. (In JHS. liv, 1934, p. 25. Cf. that article, pp. 21–25, on the chimaera in general and its provenience.)

⁴¹ The vase was listed by G. H. Beardsley, *The Negro in Greek and Roman Civilization*, Baltimore, 1929, p. 28, No. 48, where a full and very satisfactory discussion of the topic is to be found. The height of the head is 12 cm.; the diameter of its opening 12.5 cm.

pupil is indicated by an incised circle placed over a black dot. The lips are left in the buff color of the clay, the teeth are painted white, while the tongue, which shows between them, was also left in the color of the clay. The figure with its extensive black surface enlivened with white is very effective. Representations of negroes in Greek art are rather numerous and it seems that the grotesque quality of their features appealed to the artists of the archaic period. From ointment vases, where we find for the first time plastic negro heads, the type was transferred to vases appropriate in drinking bouts and was used for their decoration along with figures of satyrs and the type of Herakles as a heavy drinker. The negro plastic type includes both male and female representations, although examples of negroes outnumber those of negresses. Seltman described three Table and Mrs. Beardsley mentions eight examples of plastic negress' heads. At least two of the examples listed by the latter are uncertain—they could equally well represent negroes—but the fact remains that we have but few examples of the female type. For this reason the St. Louis vase gains in importance, since it is a perfect specimen of a type which is not so usual.

Seltman tried to prove that the heads of negresses represent the mythical Lamia who "to the childhood of Greece . . . was the Bogey who ate up naughty children." Mrs. Beardslev rightly rejected that interpretation because of the fact that "the two sexes are shown" on the vases. 45 We know from mythology that Lamia, the Ethiopian princess, with whom Zeus fell in love, was transformed into a hideous creature by Hera, a creature tormented by satyrs in the satyric plays. 46 Perhaps we can see her in the composition on a lekythos in the National Museum at Athens published by M. Mayer.⁴⁷ In the myth and on the vase Lamia is a loathsome figure who has no points in common with the almost pleasant looking and friendly plastic heads of negresses, such as the one in our possession. We can see no effort on the part of the potter to disfigure the features so as to render them hideous, but an earnest attempt to represent the racial features of the negro face. In our example and in a later example in the Robinson collection 48 the teeth show, but they are not any larger than they would be in actual life and certainly the widely grinning mouth is not unusual among negroes, even of today. We may believe that the figure on the lekythos in the National Museum is the mythical Lamia, but it will be impossible to accept that we have her represented in the plastic vases under consideration. Mrs. Beardsley explains these negro representations as a "type which happened to interest the artist" and very rightly she takes them to be "a novelty, something to tickle the sense of humor and add to the gaiety of the feast." 49 There is no doubt that these vases could add to the gaiety of a drinking bout, but I would like to see in them something more than that. Wace has already pointed out the belief of the Mediterranean people in the apotropaic power of the negro.⁵⁰ It seems reasonable to see in

⁴² Cf. Buschor in *Münch. Jb. Bild. Kunst* xi, 1919, "Das Krokodil des Sotades," pp. 1–43 and note 5 on p. 14. Also Beardsley, *op. cit.*, pp. 30 ff. ⁴³ In *AJA*. xxiv, 1920, pp. 14–26. ⁴⁴ *Op. cit.*, p. 35.

Seltman, op. cit., p. 15; Beardsley, op. cit., p. 35.
 Roscher, s.v. Lamia ii, 1818–1821; DS, p. 908; Aristophanes, Vesp. 1177, etc.

⁴⁷ "Noch einmal Lamia," AM. xvi, 1891, pp. 300 ff., pl. IX; Cf. also Buschor in AM. lii, 1927, pp. 230-234; C. H. E. Haspels, Attic Black-Figured Lekythoi, pl. 49 and p. 170.

⁴⁸ From Tarentum, Beardsley, op. cit., p. 88 and No. 189. 49 Ibid., pp. 35-36.

⁵⁰ BSA. x, 1903-04, pp. 107 ff.

the negro drinking-cups the same idea as that to be found at the back of the "Augenschalen." These cups served to enliven the feast, but also acted as apotropaic agents, as means of averting evil from the reveller. The date of our vase can be determined with some probability. Buschor has accepted the statement that the ointment vase at the National Museum at Athens bearing the love-name Leagros is the latest example of this type; ⁵¹ consequently the St. Louis vase cannot be later than 500–490 B.C.

Of the many red-figured vases in the collection I shall present only two, the Nolan amphora No. 667 and the oenochoë No. 615. The amphora (figs. 19-21) is perfectly preserved and stands to a height of 30 cm. Its decoration is placed on the upper part of the body, is carried over its rounded shoulder and is limited below by a border of meander and square. A bearded man is shown pursuing a fleeing youth on one side of the vase (figs. 19-20). The youth is running to the right, turning his head towards his pursuer. He holds one end of his mantle in his right hand, while the other end is thrown over his extended left arm. The bearded man wears a wreath of leaves, executed in diluted paint, his mantle is thrown over his arms, and he carries a staff in his right hand. Whether we have a representation of Zeus pursuing Ganymede is not certain; the race seems, however, to be exciting and is excellently represented with all its psychological implications. A single figure - a beardless youth with his lyre—is represented on the other side of the vase (fig. 21). The artist has used relief lines profusely in the rendering of the outlines of the form, of the details of chest and drapery, and has expressed in diluted paint the muscular areas of the torso (fig. 20). The bodies are strong and buoyant, the faces quite expressive, with the eyes correctly drawn and suggestive of the feelings of the figures.

The vase has long since been recognized as belonging to the ripe archaic period and as the work of the Providence Painter. The statuesque figures, recalling sculptured types (the youth with the lyre for example foreshadows the lapith of the Parthenon metope), the use of the relief line and the diluted paint, the details of the human figure and the manner of their representation prove definitely that our vase is the work of the Providence Painter. Its position among the works of that artist and especially among the vases in America by the Providence Painter has been indicated by Beazley, who groups it with three other Nolan amphorae as being of "good work, but less fine than the lekythoi" by the same painter. It can be placed about 480 B.C.

Equally representative of the Ripe Archaic style, but more troublesome than the previous example is the oenochoë No. 615 of the regular type V of that shape. ⁵⁴ It is well preserved, with a few pieces added in plaster to complete the shape. Only minor details of the decoration, such as the stems of buds, are restored, the main elements being preserved in the original. It stands 25 cm. to the top of its high handle.

The main frieze is limited by a single maeander border below and by tongue and ovolo ornaments placed at the junction of the neck to the shoulder of the vase. It is

⁵¹ Münch. Jahrb. Bld. Kunst xi, 1919, p. 15; Nicole, Catalogue des Vases Peints, p. 283; Beardsley, op. cit., p. 34.

Beazley, VA. pp. 77 and 78, No. 13; AV. p. 133, No. 14; Hoppin, op. cit., ii, p. 394; for the amphora with Apollo in Providence cf. Luce in CVA. Providence, fasc. 1, pl. 18, 1, with bibliography. For the characteristics of the painter cf. also G. Richter, Red-Figured Athenian Vases, pp. 27–33 and 53–54.
 Beazley, VA. p. 77.
 Richter-Milne, op. cit., p. 20.



Fig. 19.—Nolan Amphora No. 667 by the Providence Painter



Fig. 21. - Nolan Amphora (Back)



Fig. 20. - Nolan Amphora. Detail

decorated by a single figure of a maenad, placed on the front of the vase, and by a multiple palmette and lotus ornament covering the remainder of its surface. This ornament, fig. 24, has already been illustrated and discussed by Jacobstahl.⁵⁵

The maenad is dressed in a long chiton, over which she is wearing the skin of a leopard, attached over her left shoulder (figs. 22–23). In her right hand she holds a staff crowned with leaves, instead of a regular thyrsos, while with her left she is extending the overfall of the kolpos like a wing, in a manner familiar from other repre-

sentations of maenads dancing.⁵⁶ She is not depicted in a frenzied attitude, but rather in measured eager anticipation. Below the overfall, the chiton falls in orderly folds with alternating flat spaces and linear patterns. Relief lines are used for the folds of the chiton and for its edges, while diluted paint is used in parallel faint lines to cover the part of the chiton over the waist. Again relief lines are used for the features of the face, for one hand and for the feet, while undulating lines are massed behind the neck, around the ear, and over the forehead to represent the hair, which is separated from the background by a reserved line (fig. 23).

The dating of this oenochoë does not present grave difficulties, but its attribution is puzzling. The way in which the hair is rendered, by means of undulating lines in the main, the way in which the eye is depicted, with the pupil nearer the inner corner of the eye which is left opened, and the way in which the outline of the jaw is clearly marked and the line of the chin continued slightly beyond the line of the neck, corroborating the evidence



Fig. 24.—Decoration of "Maenad Oenochoë"

to be gathered from the details and rendering of the drapery, place the composition within the Ripe Archaic style.⁵⁷ The easy and elegant swing of the body, the free way in which the figure moves, and its relation to the space it decorates, place it almost at the end of this style and around 480 B.C.⁵⁸ The palmette ornament might suggest an earlier date, but the evidence adduced from the figure is so conclusive that I am inclined to accept the later date, which is further indicated by the form of the vase itself.

The attribution of the oenochoë is not so easy. In listing the vase Furtwängler stated that it is somewhat in the style of Phintias.⁵⁹ The similarities to that style, however, are qualities common to all painters of the Ripe Archaic period. Professor

⁵⁵ Ornamente griechischen Vasen, pl. 118a and vignette, p. 80 and pp. 79, 152, 167, 170, 172.

Cf. Richter, op. cit., pl. 42; Hartwig, Meisterschalen, pl. XXXII; Hoppin, i, p. 231 and Tarbell, AJA.
 1900, pp. 183–191, pl. I, figs. 1-3; CVA. Louvre, 2, III 1c, pl. 13, 5, 8, etc.; Nolan amphora in Boston,
 Beazley, VA. p. 110, fig. 69.

⁵⁸ Cf. Buschor, op. cit., pp. 126 ff.

⁵⁹ Sitzungsber. Bayer. Ak. 1905, p. 243.



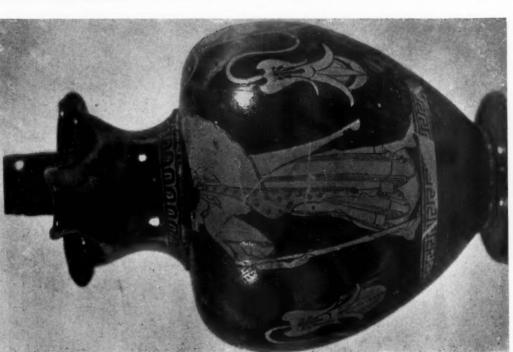


Fig. 22. - "Maenad Oenochoe" No. 615

Fig. 23. - "Maenad Oenochof." Detail

Beazley kindly pointed out to me that "the drapery (of the maenad) is extremely like that of Dionysos on the amphora (at Oxford) by the painter of the Diogenes amphora in London." The palmettes he would place earlier. Go Some of the details of the head of our figure could be compared to those of the figures on the Boston hydria, representing the story of Danae, from the hand of the painter of the Diogenes amphora. Yet if we compare our figure to that of Athena on the Petrograd krater by the same painter, we shall find that grave differences exist between these representations. Differences also exist between our maenad and the female figures of the Boston hydria, especially in the way in which the feet are represented, in the way in which the chin of our maenad is projecting and even in the way in which drapery is rendered. Because of these difficulties it will perhaps be better to leave the oenochoë in a class by itself for the time being and to accept only that it belongs to the period of the Painter of the Diogenes amphora, in other words to about 480 B.C.

GEORGE E. MYLONAS

University of Illinois

⁶⁰ For this information I am very grateful to Professor Beazley. For the Diogenes painter, cf. Beazley, AV. pp. 111–12 and 470; CVA. Oxford, fasc. 1, III I, pl. 50, 5 text and British Museum, fasc. 3, pl. 4, 2a.

⁶¹ Beazley, VA. p. 52 and figs. 32 and 33.

POSTSCRIPT TO PROMETHEUS

In my list of vases representing Prometheus Fire-lighter (AJA. 1938, pp. 618 ff.) I ought to have included a small fragment found by Miss Lamb in her excavations at Antissa in Lesbos and now in the Museum of Mitylene, but I did not notice it in time. Fig. 1 is from the same photograph as Miss Lamb's reproduction in BSA. 32, pl. 24, 13, but on a larger scale: I have to thank Miss Lamb for kindly sending me a print.

The vase was evidently either a bell-krater or a calyx-krater: part of the offset rim is preserved, decorated with the usual wreath. Attic work of about 430–420, as

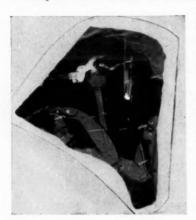


Fig. 1. – Fragment of a Bell-Krater from Antissa

Miss Lamb had already seen ("530-520" is a misprint): contemporary therefore with the Prometheus vases in Oxford and in the Feuardent collection, and only a few years later than that in Bologna.

Parts of three figures remain. On the right of the fragment, shoulder, breast, and right arm of Prometheus, holding the narthex, with flame issuing from the top, in his right hand. To the left, head and left arm of a satyr looking up at Prometheus and grasping pate in astonishment. His head is set low in the field, the crown being on the level of Prometheus' shoulder: so his body was bent, whether he was moving cautiously forward, or starting back. The hair is wreathed with ivy. All that remains of a third person, on the left, is the end of his torch. The motive was

the same as in the left-hand figure on the Oxford and Feuardent vases $(AJA.\,1938,$ pp. 619, 621): the satyr was lighting his torch at the narthex. The white of both flames is well preserved.

A brown line runs down the middle of the torch. The head of the narthex is drawn as a round (the irregularity of the outline on the right side, below, is due to the black of the background having encroached on the reserve), surmounted by a flat reel-like form, so that the whole looks something like a pomegranate: this perhaps adds color to the view that the man on the Philadelphia krater (AJA. 1938, p. 636, fig. 14) is also Prometheus.

J. D. BEAZLEY

OXFORD

SUTOR SUPRA CREPIDAM

T

When the history of an art depends for its chronological framework upon aesthetic appreciation rather than upon documentary evidence, it must of necessity be controversial: progress from the conventional to the natural, from the archaic through the fine style to impressionism and realism is not hard to follow in its main outlines, but the placing in the series of an individual work of art is more difficult, for here the capacities and interests of the particular artist must be taken into account. And in sculpture, where a hand other than the designer's may be responsible for the actual statue, the difficulty increases. External criteria of date, independent of artistic inspiration or technique, are a most welcome assistance to the chronologer, who must often lean heavily upon the "subjective" evidence of style. The most frequently available of such external criteria is fashion in dress, with one aspect of which this paper is concerned. I shall attempt to show that certain fashions in Greek footwear are more or less accurately dateable.

As the chief evidence of the prevailing mode is that provided by the statues themselves, it is obviously impossible to say exactly when one type of shoe became outmoded and another took its place; since, moreover, the less inspired artist is much dependent upon conventions handed on to him by his predecessors, it is never impossible that an earlier style should be found side by side with a later. But it is possible to signal the earliest occurrence of a new style. Thus sandals of a vaguely classical character may be seen in French paintings of the eighteenth century, but no square-toed shoes with a division in the center of the front were designed until a king of France happened to be born with six toes on each foot.

Granted these limitations, it should be possible by examination of footwear on specimens of Greek sculpture which are dated by other considerations, to discover criteria for at least a rough dating of uncertain examples. These criteria will be seen to fall into two classes: first, types and styles of footwear, and second, details of construction. The first class will be more general, more subject to extraneous influences—geographical, mythological, traditional—and therefore less dependable, but still interesting. The second should allow of categorical statements at least as to the terminus post quem of a given characteristic, while by using it in combination with the first, comparison of a doubtful specimen with others of suitable date may yield further results. The weakness of any such classification is the scarcity of examples from which to draw conclusions; but this is a handicap under which archaeologists are accustomed to work.

There are two main principles on which footwear is constructed: they may be designated as the sandal and the shoe. The latter, including the slipper, which is a simpler, less sturdy variant, is designed to cover the whole foot; the former is

¹ In a detailed analysis of the types of footwear, shoes, slippers, boots and their various subdivisions would have to be treated separately. This has been done, adequately on the whole, by Konrad Erbacher, *Griechisches Schuwerk*, Würzburg, 1914. The present purpose is not description, but the discovery of chronological implications.

essentially a sole fastened on with straps. There will obviously be a difference in the sort of person represented wearing the different kinds of footwear: travellers, peasants and servants require the complete protection of a shoe. Women, men of leisure, sometimes, and divinities of all sorts wear sandals.² Unclothed statues generally have bare feet, and warriors too are often shown barefoot.³ The carrying out of this classification in the archaic and classical periods (it breaks down, to some extent, in the Hellenistic and Graeco-Roman) may be illustrated by the following examples: the Zeus of the Acropolis limestone pediment; 4 the seated Athena; 5 most of the Korai; the Berlin goddess; 6 the Athena Parthenos; 7 most of the deities and all of the maidens on the Parthenon frieze; the Athena from the Aegina pediments; the figure of Artemisia from the Mausoleum; a female figure from the Ephesos drum⁸-to mention the first examples that come to mind-all have or had 9 simple sandals. Shoes are rarer in these periods, when the favorite subject was the heroic male who, even when draped, often scorned footgear. Examples of shoes or slippers exist on the Dioskouroi and their attendants engaged in driving home cattle on a metope from the Sikyonian treasury at Delphi; on the old serving man on the east pediment at Olympia, and on the Acropolis Kore, no. 683, which Dickins¹⁰ considered a maidservant,¹¹ because of its dark complexion and dwarfish figure. On early Attic grave stelae representing a seated woman and a standing handmaid, the seated lady generally wears sandals and her maidservant slippers completely covering the foot. 12 In the late series, as in some sculpture in the round contemporary with it, the distinction has been abandoned. It is easier to represent a foot covered by a thin shoe or slipper than one in which the toes must be carved, and the slipper type is therefore common on late journeyman work and on hastily executed Roman copies.

There is another interesting type of shoe or boot which must be mentioned. It is constructed of crossed straps and might almost appear to be a sandal except for the intricacy and closeness of the network. One of the figures in the "Daochos offering"

² Dionysos with his panther-skin boots is an obvious exception, and a sort of network shoe seems to be the accepted footwear for Asklepios. Artemis, too, represented as a hunter, usually wears boots.

² Cf. e.g. the stele of Aristion in the National Museum at Athens. For a photographic reproduction, see Rodenwaldt, Die Kunst der Antike iii, Berlin, 1927, p. 231.

⁴ Acropolis Museum No. 9; Dickins, Catalogue of the Acropolis Museum i. Archaic Sculpture, Cambridge, 1912, p. 62 f.

⁵ Acropolis Museum No. 625; Dickins, op. cit., p. 160 f.

⁶ Rodenwaldt, op. cit., p. 204.

 ⁷ Cf. the Varvakeion statuette, Rodenwaldt, op. cit., p. 309; also the description in Pliny, NH. xxxvi,
 18; Pollux, vii, 92.
 ⁸ Rodenwaldt, op. cit., p. 432.

⁹ The details of the sandal were often left to be supplied in paint. In some cases, notably the Parthenon frieze, only the sole was cut, and all the fastenings were to be painted. This practice is obvious in all its stages in the Korai from the Acropolis, no one of which has the straps carved in their entirety (cf. nos. 672, 682). In some cases only the sole is carved, but traces of the painted straps can still be seen (nos. 413, 498, fragment 429). Also, the network boots on the mounted ephebe, no. 700, are merely paint.

10 Catalogue, p. 48.

¹¹ The slippers may point to the same conclusion, though such footwear was apparently affected in the east and may be a sign here merely of Ionian origin.

¹² Berlin, Altes Museum, no. 738 (Thraseas and Evandra); no. 739 (Lysistrate); K35 (cf. Blümel, Katalog der griechischen Skulpturen des fünften und vierten Jahrhunderten v. Chr., Berlin 1928, p. 34 f.); the stele of Hegeso.

at Delphi has it, also the figure of Mausolos, here over an inner soft shoe or sock; it occurs earlier on the mounted ephebe of the Acropolis Museum (no. 700) and on numerous small terracotta lamps in the shape of feet, which range in date from the eighth century B.C. to the Hellenistic period. It was subject to much variety, 12 but the conception of it as a boot or shoe, rather than a sandal (the network being treated like fabric) is always clear.

Through the fourth century the types seem to remain distinct; the composite sandal, which has features of both shoe and sandal, seems to be Hellenistic. ¹⁴ In the Hellenistic period, also, the tongue seems to occur for the first time, usually on composite sandals, but sometimes on shoes. It is a plaque over the instep, over which the lacings cross, which usually bends back over the knot at the ankle and falls down on the instep in an ornamental overfall, fringed or scalloped at the lower edge (rather like the overfalling tongue in modern shoes of the "ghillie" type). The earliest Greek original to show this tongue is the Ince Hermaphrodite, which Ashmole¹⁵ dates in the late third century, in which the overfall is very short. The type occurs in some Roman copies of presumably earlier works (e.g. the Lateran Sophokles), ¹⁶ but such instances must be treated with suspicion, for Roman copyists were careless about the chronological exactitude of details. The tongue is apparently Hellenistic; it does not in any case appear in the fourth century on the types of footwear which later show it. ¹⁷ Composite footwear, then, should make us at least suspect a date later than the fourth century.

The details of construction are more dependable as indications of date. The soles of some sandals and shoes curve in between the first two toes (fig. 1). This I consider a sign of post-fourth-century date. I have found no examples of it in the archaic period or in the fifth and fourth centuries. It is unlikely to be accidental that no specimen from these times survives. There is, moreover, a definite indication that the fashion began with the third century. Examples from the late third century on show it in a developed form, well rounded and gracefully shaped. But an earlier example, the "Themis" from Rhamnous, which is dated by epigraphical evidence

¹³ A form of it was apparently the usual wear of Macedonian and Thessalian knights: cf. Homolle, BCH. xxiii, p. 427; a clear example appears on sixth-century coins of Larissa: cf. BMC. Thessaly, etc., pl. iv, 6 and 7.

¹⁴ The following are examples of composite sandals of the Hellenistic period or later (I know of no earlier ones): a Hermaphrodite from Pergamon in Constantinople (Mendel, Catalogue des Sculptures Grecques, Romains et Byzantines: Musées Impériaux Ottomans, Constantinople 1912-14 ii, p. 368; Dickins, Hellenistic Sculpture, Oxford 1920, fig. 1); a Zeus Ammon from the same place (Mendel ii, p. 371); a third-century Polyhymnia in Berlin (Altes Museum, no. 221); the Apollo Belvedere; the Artemis of Versailles. An especially attractive example is the Hellenistic ivory foot in the Metropolitan Museum of Art (Richter, The Sculpture and Sculptors of the Greeks, New Haven, 1930, fig. 432).

¹⁵ Catalogue of the Ancient Marbles at Ince Blundell Hall, Oxford, 1929, pls. 24, 25.

¹⁶ Rodenwaldt, op. cit., p. 415.

¹⁷ Cf. e.g. the network shoes on an Asklepios relief from Epidauros (National Museum at Athens, no. 174; Svoronos, Τὸ ἐν ᾿Αθήναις ᾽Εθνικὸν Μουσεῖον, Athens, 1903, xxxi, p. 149 f.); and the Mausolos, whereas the Hellenistic Zeus from Pergamon, AM. xxxvii, 1912, p. 321, has a network shoe with overfall.

¹⁸ A drawing of the sandal wielded by Aphrodite in the Hellenistic group of Aphrodite chastising a satyr in the National Museum at Athens, no. 3335. For the drawings which illustrate this paper I have to thank Mr. Robert Burgh of Boulder, Colorado.

to about 300 B.C., 19 has it in a crude and primitive form—a shallow curve, the ends of which are left sharp (cf. fig. 2). This is clearly the earliest stage, when the idea of cutting away a part of the sole that showed between the two toes (which were pushed apart by the thong between them in the sandal type, where the style evidently originated) had just been conceived.

The shape of the incurving varied from place to place and time to time. At Pergamon the curve was frequently narrow and very deep between the toes, swelling generously outward as it met the outline of the sole.²⁰ The high-soled boots of tragic actors also show a deep incurving.²¹ Sometimes the curving is extremely shallow; ²² sometimes it is V-shaped; ²³ sometimes it is little more than a scallop.²⁴ Sometimes

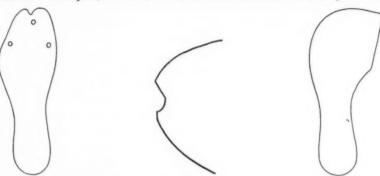


Fig. 1.—Sandal of Aphrodite, Showing Typical Incurving

Fig. 2.—Incurving on the Themis Sandal

Fig. 3.—Typical Fifth-Century Sole-Shape

the sole is scalloped all around the front.²⁵ The early crude form found on the Themis of Rhamnous is nowhere repeated among these variations.

¹⁹ National Museum, no. 232; Svoronos 171, pl. xli; Dickins, *Hellenistic Sculpture*, fig. 40. The inscription is now apparently considered by Dr. Sterling Dow to be even later. Cf. "The Drapery of the Hermes of Praxiteles" by Charles H. Morgan, 'Eq. 1987, p. 64, n. 4.

²⁰ E.g. four draped female statues from Pergamon, three wearing sandals, one embroidered slippers, now placed in the passage back of the altar reconstruction in the Pergamon Museum in Berlin; also the Leto of the altar frieze—all of the second century B.C. The Hermaphrodite (Mendel ii, 368 f.; Dickins op. cit., fig. 1) of the third century has a less deep cut, suggesting that the deepness is a Pergamene characteristic, which attained its greatest vogue in the second century. See also a draped female statue from Magnesia, in Constantinople (Mendel ii, p. 271).

²¹ E.g. the Muse of tragedy on the relief of the "Apotheosis of Homer" in the British Museum (Lawrence, *Classical Sculpture*, New York and London, 1929, pl. 115), and countless terracotta actor figurines from Myrina and elsewhere.

²² The market woman in the Metropolitan Museum (Lawrence, op. cit., pl. 137).

²³ "Minerve au Collier" in the Louvre (Froehner, Notice de la Sculpture Antique du Musée National du Louvre, Paris, 1889, 112 and p. 42; Musée du Louvre: Catalogue Sommaire des Marbres Antiques, Paris, 1918, i, p. 90).

²⁴ Conservatori Muse (H. Stuart Jones, ed., *The Sculptures of the Palazzo dei Conservatori*, by the members of the British School at Rome, Oxford, 1926, pl. 38); draped female figure in Corinth, found in 1934.

²⁵ Diana of Gabii (Froehner, 120, p. 97; Catalogue, xv); several draped female statues in Naples—nos. 6240, 6404, Far. 30; a seated muse from Miletos in Constantinople (Mendel, p. 327 f.); this is clearly a late mannerism, and quite the sort of thing we should expect to find with the drapery of the Diana.

Roman copyists are noted for their carelessness in rendering details and it is not surprising to find copies, even of fifth-century originals, with incurving soles. The incurving and other minor anachronisms appear even when the copyist has otherwise more or less faithfully rendered the earlier type of sandal.²⁶ The incurving was a Greek fashion, probably never adopted by the Romans themselves, though their artists used it somewhat freely on sandals, and it even appears on a few sculptural examples of the calceus.²⁷

In general, very early sole-shapes are rough and uncompromising, and only later is the sole shaped to follow the contours of the foot. The typical fifth-century sandal-sole has a sharp angle in front of the large toe and a straight edge along it to the joint, from which it curves in to the heel (fig. 3).²⁸ The sole is usually thick; a well known example is the frieze-banded sole of the Athena Parthenos.²⁹

In the superstructure of the sandal type various points are to be noted. In the first place, the thong which comes from between the toes and separates on the instep to go around the foot, separates high in archaic examples, but by the Hellenistic period the division has descended to the strap across the toes.³⁰ The next step is to omit the vertical strap entirely and bring a portion of the cross strap between the toes.³¹ Alternatively, it was apparently the fashion towards the end of the fourth century to omit the cross strap and provide the sandal with a loop at either side at the base of the toes, so that the thong from between the toes could be laced through these loops, crossed on the instep and then passed through the usual loops farther back, or simply brought up over the instep in the old way, disregarding the loops, as suited the fancy of the wearer.³² It is possible that this was a Corinthian fashion, since a majority of the examples has been found in Corinth.

Also, in general, in early sandals the straps are narrow and well rounded, representing the thongs clearly (cf. the Acropolis Korai). They tend to grow broader, especially the cross strap (which earlier was often made up of several thongs braided or twisted together or simply laid side by side). In some Roman work they resemble ribbons rather than thongs.³³ The use of incision to indicate straps is rare, and a sign of late, careless work.³⁴

²⁶ Examples of the incurving in copies of fifth- and fourth-century works are numerous; cf. the Louvre Aphrodite (Rodenwaldt, op. cit., p. 314); the Conservatori Leto (Richter, op. cit., fig. 90). Note also the Dresden Athena (Richter, op. cit., fig. 615) and the consequent inaccuracy of the usual restoration of the "Lemnian" (ibid., fig. 616).

²⁷ I note one in Constantinople and one in Rome (Mendel iii, p. 584; Amelung, *Die Skulpturen des Vatikanischen Museum*, Berlin, 1903, ii, p. 51), but both of these represent subjects alien to Roman

dignity: the first is an ephebe, the second Apollo Citharoedus.

²⁸ For the shape, cf. a votive stone sandal-sole, Svoronos, pl. lx, 2565. See also fig. 3 of this paper. ²⁹ Pollux, vii, 92; Pliny, NH. xxxvi, 18; cf. the colossal sandal of this type in the Palazzo Conservatori in Rome (Dickins, "The Sandal in the Palazzo dei Conservatori" JHS. xxxi, 1911; Catalogue, pl. 82). For a more sophisticated shape of sole, see the sandal on a gem in the Boston Museum of Fine Arts (Beazley, Ancient Gems in the Lewes House Collection, no. 77), dated in the late fifth or early fourth century.

³⁰ E.g. the Attic Kore in Berlin (Richter, op. cit., fig. 267) may be compared with the unfinished

female statue in Athens (ibid., fig. 437).

³¹ E.g. a female statue in Berlin, Altes Museum, no. 496 (Blümel, Römische Bildnisse-Staatliche Museen zu Berlin, Berlin, 1933, p. 20).

³² Cf. National Museum in Athens, no. 1005; Corinth Museum, nos. 7, 296, 69—all copies, possibly executed in Corinth.

³³ E.g. an Athena in the Palazzo dei Conservatori (Catalogue, pl. 67).

³⁴ E.g. a Roman work in Delos, Museum, no. 5007.

It may be repeated here that the use of paint to complete the details of a sandal is not, as Professor Carpenter thought, 35 the sign of a Roman copy, but occurs throughout the history of Greek sculpture.

To sum up, the following characteristics of Greek footwear give an indication of date:

- 1. Incurving in the sole-not before ca. 300 B.C.
- 2. Careful shaping of sole, and use of mouldings on it—accompanies the "developed style" of sculpture.
 - 3. Division of thong from between toes low on instep-late.

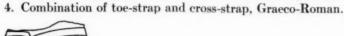




FIG. 4.-THE HERMES SANDAL



Fig. 5.—Sandal of the Venus from Ostia

5. Also, the more elaborate, composite types of sandal seem to be Hellenistic rather than classical.

The usefulness of these criteria, especially of the incurving sole, is obvious. I propose to apply them to a problem, the importance of which may justify the compilation of so many small, dull facts: the date of the Hermes at Olympia.

II

If the criteria outlined above are valid, the Hermes was not carved by Praxiteles or by any other fourth-century sculptor, for there is an unmistakable incurving in the sole of its sandal (fig. 4). It does not necessarily follow, of course, that the work is a Roman copy, though this is always possible. The sandal itself is of the composite type—network shoe at the back and open sandal in front with a thong between the toes—which my investigations lead me to believe is Hellenistic. This dating is confirmed by the plaque over the instep, which may have had an overfall added in metal.³⁶ It may be observed that the carefully cut and delicately rounded thongs do

³⁵ AJA, xxxv, 1931, p. 259.

³⁶ The metal peg projecting from the instep has been interpreted as the attachment for a rosette. Such an unstructural ornament seems to be without parallel. It seems more likely to me that it held down the lower end of a metal overfall, which would have been attached above the highest thong, where the break in the ankle occurs. It was customary for this overfall to stand up against the ankle before bending down over the instep. The original existence of such an overfall, to the underside of which a bowknot with projecting ends might perhaps have been attached, would explain the lack of sculptured sandal-fastening and the undecorated surface of the instep plaque. There may also have been thin straps of metal proceeding from just under the ends of the overfall to the sides of the foot, to

not give the impression of Roman work, which in such details is apt to be flat and sketchy; but the "assumption that there were no great craftsmen in Roman times" is, as Professor Carpenter points out,³⁷ not justified. In order to date the Hermes³⁸ more closely by means of the sandal it will be necessary to find parallels for it in one of the possible periods.³⁹

There are fortunately two details in the sandal of Hermes which are somewhat unusual—the square corners of the loops, and the little rounds, evidently for reinforcement, which occur at the lower inner angles of the area formed on the outside of the foot by the square loops, the slanting thong from heel to sole, and the thong which threads the loops. These occur also in the outermost row of meshwork of a composite network shoe on the statue of a ruler or Zeus in Pergamon.⁴⁰ This shoe is, moreover, constructed along the same lines as the sandal of Hermes—it is composed of a network over the heel terminating in loops, which are threaded by a thong growing out of a triangle of network from the side of the foot near the toes and crossing over a plaque on the instep which folds over the bowknot at the ankle and falls back over the instep in a short tongue. There is also a thong between the toes holding the plaque down to the sole, and the incurving between the toes is of the deep Pergamene variety. This shoe is solid, while the sandal of Hermes is light and elegant, but the type is essentially the same, and the small round bits are present in both. The Pergamon statue is dated in the second century B.C.

The rounds occur in a modified form in the sandals of the "Venus of Ostia" (fig. 5) in the British Museum.⁴¹ The sandal here is of a similar type—network

increase the solidity of the sandal. A roughening in the marble of the foot where the small toe joins it and a corresponding depression in the sole underneath favor, though they do not prove, this suggestion. Such side straps may have been indicated in paint, as was probably the thong between the toes. Or they may not have existed. (For a sandal finished in metal see the Artemis in the Capitoline Museum, Stuart Jones ed., *The Sculptures of the Museo Capitolino*, pl. 71: "Formerly there were bronze sandal-straps between the first and second toes)."

³⁷ AJA. xxxvi, 1931, p. 259.

 38 Oscar Antonsson has tried recently to prove that the Hermes is really a Pan and once formed part of a group including a nymph (*The Praxiteles Marble Group at Olympia*, Stockholm, 1937); these contentions have no bearing on the present argument, except in so far as his insistence on the Praxitelean origin of the group forms an integral part of Antonsson's argument for the identification as Pan—an identification which I have discussed at some length in a review of Antonsson's book (*AJA*. xiii, 1938, p. 300).

of Gabii and the Artemis of Versailles, a group of eclectic Graeco-Roman statues, the status of which is still not clearly defined. The Diana of Gabii is supposed by some to be a copy of Praxiteles' Artemis Brauronia; the Apollo has been referred to an original by Leochares (cf. Lawrence, Classical Sculpture, p. 338; the sandal overfall is short); the mincing mien and mannered drapery of the Artemis of Versailles has been termed Julio-Claudian (the "overfall" stands straight up against the ankle and does not fall back at all). It is curious that this group of statues, including the Hermes, should have in common the uncertainty of their dating and the similarity of their sandals; the dating of the Hermes may possibly shed some light on the others.

 40 Ippel, AM. 1912, p. 32 1. An unpublished fragment of a marble foot in the storeroom of the National Museum in Athens, which was drawn to my attention by Dr. Sterling Dow (whose kindly interest in my work on footwear has manifested itself in other ways), has a sandal or shoe of the same type; the

one loop remaining is rounded, but the meshwork is clear-cut and angular.

a JHS. xxi. The "overfall" is only a vague projection of the instep plaque above the straps at the ankle; if the sculptor of the Venus was imitating the Hermes, his model failed him here; and, not wishing to add a metal attachment, he had to fall back on his own invention, with poor results.

heel, instep plaque fastened down between the toes, straps from the front sides of the foot crossing over this plaque—here they are held in place on it by a loop through which they are threaded—and picking up the heel network in two loops. The rounds here are clearly for decoration only, since they occur on a strip of leather which is carried along the sole at the outside of the foot, one between the thong from outside the toe and the first loop, the other inside the loop. The technique throughout is flat and sketchy, but it seems clear that this is the same sort of thing as the sandal of Hermes, executed by a much less good artist. The "Venus from Ostia" has been described as subject to Praxitelean influence, because in proportions and general effect it resembles the Hermes, and it is certainly in the same tradition; the Venus must follow the Hermes, therefore, and cannot be used to prove anything about it.

There is another use of reinforcement rounds which may be interesting. The so-called Protesilaos, or wounded warrior in Naples, ⁴² has half-shoes, covering the back of the foot and leaving the front, including the sole, bare. At the side of the foot, where the vertical piece from the sole meets the loops over the ankle-bone, there is a half round left on each side of the loop-thong just above the join—obviously to prevent a break in this narrow part of the strap where a good deal of strain comes. This is a Roman copy, perhaps from a fourth-century original, and the contrast between the flat, wooden straps here and the carefully rounded thongs of the Hermes, of the large, sloppy reinforcements of the Protesilaos with the delicately cut, three-dimensional ones on the Hermes, points to a difference in quality and spirit of the artists, if not necessarily in the date of the works.

Rectangular loops like those of the Hermes occur in a marble foot in the Anti-kythera find,⁴³ which is probably Hellenistic in date; in a bronze statue in Delos (A 1003 in the museum), dated epigraphically to the second century B.C., or later; in an Apollo Citharoedos in the British Museum (no. 1380); in the Dirce of the Farnese Bull group in Naples; and in the Artemis of Versailles in the Louvre; also in the figure of Leto on the Pergamon frieze.

On the basis of these parallels, other considerations aside, the sandal of Hermes would be dated in the Hellenistic period, probably in the second century B.C. And though one must not assume that no good work was produced by Roman copyists, in point of fact the standard among them was low, and the known Roman copies we possess are mostly obviously such from their flat, uninspired style and hasty work. In spite of Blümel's and Carpenter's arguments, it is difficult to place the Hermes at Olympia in the same category as, say, the Protesilaos at Naples. On their own showing, indeed, it is not necessary, for the objections brought by them to a fourth-century dating—tool-marks, recutting, mannerisms in drapery, etc.—are admitted by them to be Hellenistic as well as Roman. It is to the Pergamene frieze that Professor Carpenter goes for examples of his zigzags and countersunk frets,⁴⁴ and it is to the flourishing period of Pergamene art that our analysis of the type of

43 Svoronos, op. cit., pl. xvi.

⁴² National Museum of Naples: The Archaeological Collections, p. 14, fig. 25.

 $^{^{44}}$ In his article "Who Carved the Hermes of Praxiteles?" in AJA. 1931; I assume that the reader is familiar with the arguments put forth on both sides of the question in the series of papers on the Hermes in that volume.

sandal has led us. Moreover, the statue stood on a base bearing mouldings of the second or first century B.C., 45 and there is nothing to show that it was ever set up on any other.

An analysis of the drapery of this statue has led Professor Charles Morgan not only to an early second-century date, but also to a named sculptor, the younger Praxiteles who worked in Pergamon about this period.⁴⁶ The evidence of the sandal fits this hypothesis admirably, and the agreement of two such technical studies should prove conclusive. It is to be hoped that the examination of footwear may be further useful in the dating of Greek statues, and that the cobbler will therefore be justified, for once, in not sticking to the last.

MARY WALLACE

BOULDER, COLORADO

45 Dinsmoor, in AJA. 1931.

⁴⁶ "The Drapery of the Hermes of Praxiteles," 'Εφ. 1937, pp. 61–68. Professor Morgan adduces the Lykosoura drapery as a parallel. It is interesting to notice that the sandal of the Artemis from Lykosoura has the incurving sole, is of a composite type—covered heel and sandal front—and was completed by a metal ornament for which the attachment hole still exists. The straps, moreover, are carefully rounded like those of the Hermes.

THE RAMP OF THE TEMPLE OF ASKLEPIOS AT EPIDAUROS

EVER since Kavvadias brought to light the remains of the temple of Asklepios at Epidauros and the long inscription (IG. iv, 1484 = IG.² iv, 102) relating to its construction, various attempts have been made to find in the inscription the term for a rather important part of the building, namely its ramp.¹

Kavvadias² hesitatingly proposed to identify it with the ποίστασις (Doric

for πρόστασις), partly restored by him in the following passage:

Lines 39-40: Μνάσιλλος ἕλετο λατομίαν τῶι στρώματι καὶ τᾶι πο[ιστά]σει ταμὲν καὶ ἀγαγέν ΧΧΧΧΗΗΗΞ

The reading ποίστασις was adopted by all subsequent editors and commentators of the inscription, though few seem to have accepted the suggested meaning.³

Ebert 4 has argued that the ramp is the όδοί in line 49: Εὔδαμος ἕλετο τὸς όδὸς παρέχεν ΗΗΗΗΗΗΗ. In this he followed Keil, who was prompted chiefly by technical considerations to identify the ramp of the Tholos with the ὁδός of its inscription: IG. iv, 1485 = IG.2 iv, 103.136-7: ὀδοῦ ποιήσιος Σαννίωνι [*HH. The principal objection of to Ebert's interpretation is the use of the plural όδοί in the first case and of the singular όδός in the second. The ramp could hardly have been designated by a word in the plural. No less difficult is it, in my opinion, to account for the great discrepancy of cost -700 and 140 dr. respectively - between the ramp of the temple and that of the Tholos, considering that these were practically of the same size. One is forced, therefore, to retain the usual acceptation of this term and to see in the δδο' of the temple not only the two thresholds of the cella and the prodomos doors, but also the sills which supported the grilles at the east front. It is true that the exact position of these grilles or grilled doors, which are spoken of as τὰ διὰ στύλων θυρώματα,8 cannot be determined from the inscription; but in view of the fact that the temple lacked an opisthodomos, we may assume that, in order to provide more room for the dedicatory offerings, in addition to the two angle intercolumniations of the prodomos, grilles also closed the three middle intercolumniations of the east front, and the lateral openings between the penultimate columns of the front and the antae of the walls, an arrangement not unlike that found in the temple at Aegina.9 That stone sills were sometimes used to support such grilles is known both from the inscriptions 10 and the monuments. 11

999

¹ Kavvadias, Fouilles d'Epidaure, pl. VI, fig. 1, 2; Lechat-Defrasse, Epidaure, fig. on p. 52; Durm³, Die Baukunst der Griechen, fig. 102.

² Op. cit., p. 87.

³ Only Kayser, *Musée Belge* 1904, p. 9, accepted it without reservations. Cf. Fraenkel, *IG.* iv, and Hiller von Gaertringen, *IG.*² iv. Baunack, *Aus Epidauros*, p. 71, explained ποίστασις as the frieze; cf. Durm, *op. cit.*, p. 177.

⁴ Fachausdrücke des griechischen Bauhandwerks, p. 14.
⁵ AM. 20, 1895, p. 104.

⁶ Blumenthal, Hermes 63, 1928, p. 413, note 2, has shown that the verb παρέχεν could not have been used for the ramp. ⁷ Cf. Kavvadias, op. cit., pl. I. ⁸ IG.² iv, 102. 63, 262. Τὰ διὰ στύλων in l. 47. ⁹ See Furtwängler, Aegina, pp. 34 ff. and pls. 33, 36, 38.

 ¹⁰ IG.2 ii, 1672.174: δδοὶ ταϊς θυροκινκλίσιν λίθινοι. From another Epidaurian inscription we learn that δδός also designated the sill of a window: IG.2 iv. 109. 105: εἰς τοὺς φαυστῆρας δδέων ἐκ[ατό]ν.
 11 Cf. Orlandos, AM. 40, 1915, pp. 29 ff. for such sills in the temple of Athena Nike.

In regard to the 3655 of the Tholos, it is highly improbable that Sannion had anything to do with the making of the ramp; for Sannion was primarily a marble worker who, in collaboration with another fellow craftsman named Kommodion, had carved the delicate mouldings of the door.¹² On the other hand, that one of these two men was also charged to make the threshold is just what one would have expected. And in this case, as in many others, the threshold was evidently inserted between the jambs at a later stage of the construction, in order to avoid possible injury to it during the transportation of heavy materials to the inner parts of the building.

Another attempt to identify the ramp of the temple was made by Vallois,¹³ who contended that its name was στοιβά. This interpretation was based on the assumption that στοιβά occurred only once in the temple inscription,¹⁴ whereas Hiller von Gaertringen's and Klaffenbach's new reading of the text, as given in the *editio minor* vol. iv of the *Inscriptiones Graecae*, shows this word in two more places,¹⁵ in both of which the meaning is clear: the term designates the solid foundations of the peristasis, the walls and the floor.

A careful study of the whole inscription has convinced me that Kavvadias erred only in so far as he restored the name of the ramp as ποίστασις; for a ramp can hardly be said to stand in front of a building. I believe that the word should be read ποτίβασις, 16 Doric for πρόσβασις. Literally, πρόσβασις signifies means of approach, access, and ancient writers use it especially of a sloping or uphill approach. 17 This latter notion is especially to be found in the following passage from Lucian, who employs πρόσβασις in connection with a mythical ladder reaching up to heaven: Charon 3 "Ομηρος ὁ ποιητής φησι τοὺς 'Αλωέας υίέας, δύο καὶ αὐτοὺς ὄντας, ἔτι παῖδας ἐθελῆσαί ποτε τὴν "Οσσαν ἐκ βάθρων ἀνασπάσαντας ἐπιθεῖναι τῷ 'Ολύμπω, εἶτα τὸ Πήλιον ἐπ' αὐτῆ, ἱκανὴν ταύτην κλίμακα ἕξειν οἰομένους καὶ πρόσβασιν ἐπὶ τὸν οὐρανόν.

The proof, however, that the ramp of the temple of Asklepios must be sought in the above-cited passage mentioning Mnasillos' contract is afforded, in my opinion, by the following considerations. We know that the foundations of the temple were of local poros. The quarrying, transportation, and setting in place of these stones formed a single contract expressed by the formula $\tau\alpha\mu\dot{\epsilon}\nu$, $\dot{\alpha}\gamma\alpha\gamma\dot{\epsilon}\nu$ kai $\sigma\nu\nu\theta\dot{\epsilon}\mu\epsilon\nu$. The phrase occurs three times ¹⁸ in connection with the foundations $(\sigma\tau\sigma\iota\beta\dot{\alpha})$ of the peristasis, of the cella walls, and of the floor.

The material of the superstructure was likewise of poros, but this came from Corinth, being apparently of a better quality. The stones were quarried and transported to Epidauros by natives of Corinth, and the formula used is λατομία καὶ

¹² Cf. IG.² iv, 103. 90–104. ¹³ BCH. 36, 1912, pp. 219 ff. ¹⁴ L. 3

¹⁵ Ll. 11-12: 'Αντίμαχος 'Αργεῖος ήλετο στοιβάν το σακό ταμέν καὶ άγαγέν καὶ συνθέμεν, and ll. 33-34: Λυσικράτης έλετο στοιβάν ταμέν καὶ άγαγέν καὶ συνθέμεν τῶι στρώματι.

¹⁶ For other compounds with the preposition ποτι (=πρός) in the inscriptions of Epidauros see IG.2 iv, 110, 22 (ποτισπαστήρ), 121. 44 (ποτιβλέπω), 122. 133 (ποτιπορεύομαι). Cf. Buck, Greek Dialects, p. 54, 4.

¹⁷ Thuc. vi, 96; vii, 45; Herod. 3, 111; Eur. Phoen. 181 and Electra 489. A staircase, on the other hand, was known as ἀνάβασις: cf. Rev. de Philol. 43, 1919, p. 212, l. 12 κα[τεξέσαμεν βαθμί]δας δύο ἐν τῆ ἀναβάσει τῆ ἐν τῷ ἀδύτω.
¹⁸ Ll. 3, 11–12, 33–34.

άγωγά.19 The third operation in this case was the working out of the stones, which was called ἐργασία and formed a separate contract. The significant thing about these two formulas is the use of two different words to express one and the same thing: ταμέν for the quarrying of the foundation stones and λατομία for that of the stones of the superstructure. Both of these terms now occur in Mnasillos' contract: Μνάσιλλος έλετο λατομίαν τῶι στρώματι καὶ τᾶι πο[τιβά]σει ταμὲν καὶ ἀγαγέν. This fact suggests that Mnasillos contracted to furnish two different kinds of stone destined for two different parts of the building; for the phrase is really equivalent to λατομίαν καὶ ἀγαγὲν τῶι στρώματι καὶ ταμὲν καὶ ἀγαγὲν τᾶι ποτιβάσει. The λατομίαν καὶ άγαγὲν τῶι στρώματι refers to the quarrying and transportation of the material of the floor (στρῶμα), the paving of which is mentioned in a later passage: ll. 52-53 'Εχέτιμος ελετο τὰν στρῶσιν τοῦ ναοῦ ["ΗΗΓ::::: The word λατομία for the quarrying of these stones (black and white limestone slabs, several specimens of which have survived) implies that these came from some distant point. On the other hand, the use of the word ταμέν for the quarrying of the material of the ποτίβασις indicates that this material was similar to that employed in the foundations, i.e., the local poros. The only other part of the temple in which this stone is known to have been used is the ramp.²⁰ Moreover, the fact that the latter is not bonded to the krepis proves, as in the case of the temple at Aegina, that it was constructed at a later stage of the building operations.²¹ Such a stage is also marked by Mnasillos' contract, which falls in the third year of the temple's construction.

SOCRATES M. ELIOPOULOS

NEW YORK CITY

¹⁹ So in Il. 5-6, 14-15, 16-17, 18-19 for the stones of the cella and of the peristasis.

²⁰ Καββαδιας, 'Ιερόν p. 39; Lechat-Defrasse, op. cit., p. 51.

²¹ It may be observed that the construction of the ramp is not mentioned in the inscription, an omission which perhaps can be explained if we assume that this was included in the στρῶσις.

BRONZE STATUETTES OF ZEUS KERAUNIOS

The acquisition by the Princeton Museum of Historic Art of an excellent nude male statuette in bronze which is quite certainly a Zeus Keraunios of the late transitional period (figs. 1–5) has led to a restudy of the series to which it belongs in order that the subject may be more sharply defined and its significance in the cult of the god established.

The representation of Zeus with a thunderbolt in the right hand and an eagle on the outstretched left seems to have appeared first in the Peloponnesus in the sixth century, to judge from discoveries on Mt. Lykaon and at Olympia. The nudity of the several extant examples indicates that the type was at home on the mainland of Greece. The earliest was found on the site of the altar of Zeus Lykaios (fig. 6). The god stands like an archaic kouros with arms, thunderbolt and eagle directed forward. A second statuette of a later period from the same sanctuary, which is to be restored with the same attributes, suggests that the Lykaian Zeus held thunderbolt and eagle because of some definite tradition of his cult on the Arcadian mountain.

The earliest Zeus Lykaios does not move forward, but action is indicated by the upraised thunderbolt. Later examples clarify the latent motif of attack by making the god advance as he aims his missile at an enemy toward whom his eagle also flies or is just about to fly. A good illustration is the statuette from Ambracia (fig. 7). In other examples the forward step has become a vigorous stride, as in the splendid statuette from Dodona (fig. 8) where, however, the eagle is now missing from the outstretched left hand. The question which seems not to have been put to this Zeus is: Whom are you attacking? The motif is entitled to a closer definition than the vague description "strenuous type." 5 The answer to the question is given by sculpture and painting. In the gable of the temple on Corcvra, Zeus has overtaken a giant fleeing to the right and is about to smite him with a thunderbolt which he holds in the same position as is found on the statuettes (fig. 9).6 Here Zeus is nude, as are the statuettes. On a Chalcidian hydria of the same period, Zeus advancing rapidly to the right is again about to strike down a giant (fig. 10). The gigantomachy in the art of the sixth century could be abbreviated to a monomachia of two protagonists. But that was in gable sculpture and painting. In substantive sculpture the theme was

¹ The development of the series is traced by Cook, Zeus i, pp. 84 ff.; ii, pp. 739 ff. He does not accept Casson's identification of a geometric bronze from Dodona as a figure of Zeus, op. cit., ii, p. 1222.

 $^{^2}$ Kourouniotes dates the bronze in the late seventh century, 'Eq. 1904, p. 180, but Lamb assigns it to the early sixth, BSA. 1925–26, p. 140. It is 0.10 m. high.

³ 'Eφ. p. 185, fig. 11. ⁴ Δελτ. parar. 1920–1, pp. 170–171, figs. ⁵ Cook, Zeus ii, p. 1222. ⁶ The restricted space forced the sculptor to place Zeus close to the giant, who has one knee on the ground in indication of his rapid flight from the god. Hence, of necessity, the head of Zeus and his thunderbolt are directed downward instead of horizontally as in the earlier statuettes. Zeus is also represented about to smite Semele with a thunderbolt, but this theme was of local Theban significance and seems to be limited to RF vase-paintings and was not a gable subject as was the gigantomachy. For scenes of Zeus and Semele see Cook, Zeus ii, pp. 24–26.

⁷ FR., pl. 32. The giant has a serpent tail in place of each leg, a hybrid unknown in the archaic sculptured gigantomachy.

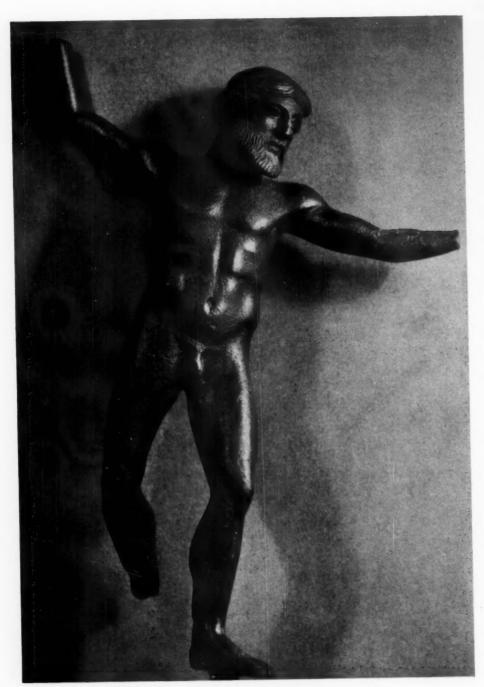


Fig. 1.—Statuette of Zeus at Princeton



Fig. 3



F1G. 2

STATUETTE OF ZEUS AT PRINCETON



Fig. 4



Fig. 5



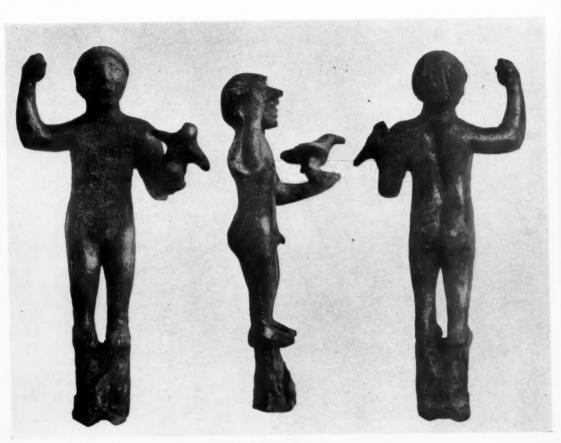


Fig. 6.-Zeus Lykaios



Fig. 7.—Zeus from Ambracia



Fig. 8.-Zeus from Dodona



Fig. 9. – Zeus and Giant from Gable of Corcyrean Temple



Fig. 11.-Zeus by Hybrisstas

still further abbreviated by the omission of the giant, who was left to the imagination, just as were the tyrants against whom Harmodios and Aristogeiton advanced in the famous bronze group by Antenor.

That the eagle which appears on the left hand of the earliest statuette from the Lykaian sanctuary was of especial significance is shown by the pair of gilded eagles each of which surmounted a column before the altar. Pausanias says that these columns faced the east, a statement which implies that the surmounting eagles did also. Such was the orientation of the eagle, apparently, which was perched on the left hand of a bronze statue of Zeus by the Aeginetan Aristonous in the Altis at Olympia. For Pausanias says that the Zeus faced the rising sun, and since the god and his eagle always face the same direction in the earlier statuettes and coin-types, this coincidence may be assumed for the statue by Aristonous. There was some reason



Fig. 10.-Zeus and Giant from Chalcidian Hydria

for this orientation which Pausanias remarked of another statue of Zeus not far from that by the Aeginetan sculptor. ¹⁰ The reason probably lies partly in the belief that the eagle could look straight at the sun ¹¹ and partly in the superstition that an eagle flying toward the sun was a favorable omen. Hector, ignoring an eagle flying on the left, said that he did not care whether birds went to the east and the sun or to the left and darkness. ¹²

If the early bronze statuette of Zeus Keraunios which was dedicated in his Lykaian sanctuary (fig. 6) represents him fighting a giant, then there should be some

⁸ Pausanias viii, 38, 7.

¹⁰ v, 23, 1-3. By Anaxagoras of Aegina. It commemorated the defeat of the Persians at Plataea.

¹¹ Aelian ii, 26. If the earliest temples of Zeus had in their eastern gables the figure of an eagle, then ἀετός, the word for gable, is readily explained, the more so if the eagle was anciently given the vulture's habit of facing the sun and opening its wings widest when the sun is shining brightly (cf. D'Arcy Thompson, Glossary of Greek Birds, p. 9). Reinach thinks an eagle fastened in a gable to protect the temple against lightning was responsible for the Greek word for gable (RA. 1907, ii, pp. 59 ff.), while Thompson (op. cit., p. 16) thinks that originally the aetos was a winglike acroterion. On a coin of Tralles of imperial date is an octostyle temple with an eagle as the sole pedimental figure (BM. Cat. Lydia, pl. 35, 1 and p. 338). From the eastern gable of a temple of Zeus, with its centrally placed eagle with spread wings, came the Greek name for the triangular space which the bird occupied.

¹² Iliad xii, 195 ff.

warrant in the traditions of the place for the choice of that theme. Such warrant there is. Lykaon, who ruled Arcadia and gave the title Lykaios to Zeus,18 had fifty sons who surpassed all men in arrogance and impiety. Zeus, wishing to make trial of them, came disguised as a working man. The sons of Lykaon slew a male child, mixed his vitals with the offerings and served the mixture. Zeus, in wrath, upset the table, which was really the altar of the god, and smote Lykaon, together with all his sons save the youngest, who was spared when Earth touched the hand of Zeus.¹⁴ In this story the sons of Lykaon resemble the giants whose mother Earth also supplicated Zeus to spare her offspring.¹⁵ One of the sons of Lykaon, Harpolykos, shared his name with a giant who appears in a gigantomachy on a vase of the sixth century. 16 There is further evidence of the giants in Arcadia. Its town of Bathos claimed to be the scene of the gigantomachy, thus rivalling Thracian Phlegra. Arcadia was also called Gigantis.¹⁷ Hence, when Zeus in anger smote the sons of Lykaon, he smote Arcadia. The dedication then at the Lykaion altar or table, of statuettes of Zeus with thunderbolt, commemorates the attack which he made upon the insolent sons of Lykaon in their quality as giants. The presence of the cult on mountain peaks such as Lykaion and Ithome was probably due to the tradition that the giants attacked a mountain top where Zeus was enthroned.

The second attribute of Zeus Lykaios, to judge from his earliest statuette, is the eagle which is flying or about to fly in the direction in which the god will hurl his thunderbolt (fig. 6). Thus bolt and bird have the same destination, the giants. The eagle is not merely an attribute, but an active participant in the struggle, as later in the great Pergamene gigantomachy, where it flies with the thunderbolt of Zeus in its talons. In a painting or a relief the eagle could be shown flying, but in free sculpture the bird had to be placed on the pedestal or on the figure, just as in Hellenistic statuettes of Aphrodite an Eros is perched upon her shoulder. ¹⁹ The rare Olympian coin-types of the fifth century which show an eagle on the hand of Zeus derived that detail from the free statue which they copied. ²⁰ Tradition had it that the eagle flew beside Zeus in the battle against the giants. ²¹

The identification of the insolent king Lykaon and his sons with the giants and their destruction by thunderbolts call to mind other mythical kings who were likewise struck down by Zeus. Salmoneus, who went from Thessaly to Elis, where he founded a city, insolently sought equality with Zeus, demanded the god's sacrifices for himself and hurled lighted torches toward heaven in imitation of lightning. For this impiety Salmoneus and all the dwellers of his city were laid low by the thunderbolt of Zeus. His experience, which resembles that of the giants, as well as the destruction of the house of Oenomaos by a thunderbolt, may account for the popularity in the Altis of Zeus Keraunios with the eagle, of whom there were at least two statues and several statuettes. That this Zeus was particularly significant

¹³ Pausanias viii, 2, 3. ¹⁴ Apollodoros, Bibl. iii, 8, 1.

¹⁵ As noted by Mayer, Die Giganten und Titanen, 1887, p. 34.

¹⁶ Figured in Cook, Zeus ii, p. 712, pl. XXX; cf. p. 713, note 2, and Mayer, op. cit., p. 34.

¹⁷ Steph. Byz. s.v. 'Αρκάδια. 18 Cf. Mayer, op. cit., p. 34.

¹⁹ For examples see Bieber, RM. 1933, pp. 262, 263 and pl. 46.

²⁰ Figured in Cook's Zeus ii, p. 741. 21 Schol. ad Iliad, viii, 247. 22 Apollodoros v, 22, 5 and 7.

²² Pausanias v, 22, 5 and 7; Olympia, die Ergebnisse iv, pls. 7-8.

at Olympia is made quite certain by his appearance on its coins in the fifth century.²⁴

Among several statuettes which may have represented Zeus Keraunios and his eagle none is more interesting than the inscribed archaic example from Epidaurus (fig. 11, p. 229). Its attributes are missing, so that it might be restored either as a warrior with a spear or as a Zeus with a thunderbolt and eagle.²⁵ The latter restoration is favored by the inscription on the base which names one Hybrisstas as the sculptor. This unusual name is significant, because the Arcadians were anciently called ύβρισταί, 26 They had a second name of the same character προσέληνοι which was derived from the verb προσελεῖν, meaning ὑβρίζειν. Mayer cites a scholion to the effect that the Arcadians were so called because the moon appeared shortly before the war of Herakles against the giants.²⁷ This shows that a title of the Arcadians meaning "the insolent" had something to do with the giants. In view of the Phocian words φλεγυρά and φλεγυᾶν (φλέγειν "to flash"), with their respective meanings ύβριστική and ύβρίζειν.28 the title προσέληνοι is rather to be derived from σέλας "flash" than from σελήνη. The two Phocian words are congeneric with Φλέγρα, the name of the place in Thrace where Zeus destroyed the giants with his flashing thunderbolt. The semantic connection between these two words for "flash" and "insolence" seems to lie in the possession of the torch as a symbol of lightning by rivals of Zeus like Salmoneus at Olympia.29 This was insolence on their part. When, therefore, the name Hybrisstas appears on the base of an archaic statuette which is Arcadian in aspect,30 one is tempted to connect it with the Arcadian national title Hybristai. In the last analysis the sculptor's name is the equivalent of the ethnic Arcas. His statuette then probably commemorated the Arcadian Zeus, who smote Lykaon and his insolent sons,31 and should be restored with thunderbolt and eagle after the Lykaian pattern. That it was inspired by some statue of large size may be inferred from its inscribed base which is unique among small bronzes, but not among large statues.32

In the statuettes thus far considered the god looks directly ahead, "horizontally" toward an imaginary giant. That giant may be either near or somewhat removed from the god. With the greater freedom of the fifth century came a clearer indication of the position of the giant. To suggest that the Zeus is close upon the giant, the gaze of the god, his thunderbolt and outstretched arms are all directed downward toward

²⁶ Schol. ad Prom.V., 438 (Dindorf iii, p. 22): προσελούμενου: ὑβριζόμενου ὅθευ καὶ ᾿Αρκάδες προσέληνοι · ὑβρισταὶ γάρ. Prometheus chained to the rock uses the word to describe the treatment accorded him.

 $^{^{27}}$ Mayer op. cit., p. 36; schol. ad Apoll. Rh., iv. 264, where such a variety of explanations is given to indicate that the real explanation had been lost.

²⁸ Mayer, op. cit., p. 17; cf. Hesychios, s.v. φλεγυρά.

²⁹ The prefix in the Arcadian name Proselenoi may mean that they were predecessors of Zeus in the possession of the thunderbolt.

²⁰ Lamb, op. cit., p. 95.

²¹ Pan, who had a sanctuary on Mt. Lykaion, was the son of Zeus and Hybris. On his mother's side he was then ὑβριστής.

 $^{^{32}}$ Cf. Löwy, Inschriften Griech. Bildhauer, pp. 28, no. 33; 30, nos. 37, 41 from Olympia. Their date is the fifth century. The names of the sculptors with the verb $\pi o \iota \epsilon \iota \nu$ are here found on the horizontal surface of the base.

the ground before him.²³ The relative positions of the pair are those of Zeus and the giant in the Corcyraean gable (fig. 9), but there the positions were imposed upon the sculptor by the raking cornice of the temple. An intermediate step in the development may be seen in the bronze discovered at Olympia, the arms of which slope downward but the god looks to the right without lowering his head.²⁴

There remains to be discussed an example of the later motif, exemplified in a bronze statuette acquired by Professor Mather for the Princeton Museum of Historic Art (figs. 1-5). The missing hands of this finely modelled bronze statuette are to be restored with thunderbolt and eagle.36 The bird rested upon the palm rather than upon the back of the hand as is usual in the earlier versions of the theme. In keeping with the Greek demand for unified composition the arms and the head of Zeus are equally inclined downward, but as in earlier examples the right hand is raised enough to suggest that when the god hurls the bolt it will pass over the eagle. The arms and the chest are in the same plane, but the head and left leg are turned forward at an angle of ca. 45°. The god does not stride forward with the aggressiveness of the statuette from Dodona (fig. 8). His right leg was somewhat warped apparently at the time of casting. The date of the statuette must lie between 460 and 450. The closest resemblance to the severe treatment of the hair above the strophion and at the back of the head is found in the hair of Apollo in the western gable of the temple of Zeus at Olympia. Both heads have a closely similar roll of hair. This is the more significant in view of the definitely Peloponnesian proportions of the Princeton statuette and the popularity of Zeus Keraunios at Olympia, as attested both by excavation and the record of Pausanias. The arrangement of the hair should also be compared with that of a bronze statuette of Dionysus dated by Bulle about 460.37

The provenance of the Princeton statuette is not known. It is said to have come from Aegina, where the sculptor Aristonous apparently in the early years of the fifth century represented Zeus with thunderbolt and eagle. Shortly after 455 Hageladas the Argive made a cult image of Zeus for the Messenians. Pausanias does not say what attributes this statue held, 38 but they may be learned from the coins which the Messenians struck on their return to reëstablish their native city in 369. On these Zeus holds the thunderbolt in his upraised right hand and the eagle on the extended left. 39 The close agreement in proportions of this Zeus and the Princeton statuette indicate an Argive origin for the latter.

G. W. ELDERKIN

PRINCETON UNIVERSITY

²³ Olympia, die Ergebnisse iv, pl. 7, no. 43; pl. 8, no. 44.

²⁵ A very brief notice of this statuette appeared in the *Bulletin of the Department of Art and Archaeology* of Princeton University, June, 1938. The statuette is 0.151 m. high.

³⁵ Other statuettes of Zeus have suffered the same loss. Cf. Olympia, Die Ergebnisse iv, pls. 7–8. The loss of the hands may have been due to the casting of the attributes in one piece with the figure. Cf. 'Εφ. 1904, p. 194, figs.

³⁷ Der schoene Mensch, pl. 45.

²⁸ iv, 33, 2.

39 For several of the coins see Cook, Zeus ii, p. 742, especially figure 673.

ARCHAEOLOGICAL NEWS AND DISCUSSIONS

NOTES ON RECENT ARCHAEOLOGICAL EXCAVATIONS SUMMARIES OF ORIGINAL ARTICLES CHIEFLY IN CURRENT PUBLICATIONS

STEPHEN B. LUCE, Editor-in-Charge

Fogg Museum of Art, Harvard University, Cambridge, Mass.

ADVISORY BOARD

Egypt-Dows Dunham, Museum of Fine Arts, Boston

Orient. Western Asia-WILLIAM F. ALBRIGHT, Johns Hopkins University

Far East-Benjamin Rowland, Fogg Museum of Art, Harvard University

Greece. Prehistoric-G. E. MYLONAS, University of Illinois

Greek and Roman Sculpture - MARGARETE BIEBER, Columbia University

Painting and Vases-George H. Chase, Harvard University

Epigraphy-Benjamin D. Meritt, Institute for Advanced Study

Architecture - RICHARD STILLWELL, Princeton University

Numismatics - E. T. Newell, American Numismatic Society, New York City

Rome. Architecture and Painting-Clark Hopkins, University of Michigan

Slavic Archaeology - Clarence A. Manning, Columbia University

American Archaeology - HERBERT F. SPINDEN, Brooklyn Museum

Mediaeval Art-Charles R. Morey, Princeton University

Bibliography, General - DAVID M. ROBINSON, Johns Hopkins University

CONTRIBUTING EDITORS

Classical Archaeology - CEDRIC BOULTER, University of Cincinnati (Vases)

AGNES BALDWIN BRETT, American Numismatic Society (Numismatics)

SIDNEY N. DEANE, Smith College (Sculpture)

ROBERT E. DENGLER, Pennsylvania State College (General)

STERLING Dow, Harvard University (Epigraphy)

HAROLD N. FOWLER, Washington, D. C. (General) SARAH E. FREEMAN, Johns Hopkins University (Vases)

HAZEL HANSEN, Stanford University (Prehistoric Greece)

J. Penrose Harland, University of North Carolina (Prehistoric Greece)

MARY ZELIA PEASE, Bryn Mawr College (Vases)

LUCY T. SHOE, Mount Holyoke College (Architecture)

H. R. W. SMITH, University of California (Vases)

WILHELMINA VAN INGEN, Wheaton College (Vases)

FRANCIS R. WALTON, Haverford College (Epigraphy)

SHIRLEY H. WEBER, Gennadius Library, Athens (Numismatics)

Oriental Archaeology - John W. Flight, Haverford College

HENRY S. GEHMAN, Princeton Theological Seminary

CYRUS H. GORDON, Smith College

FRED V. WINNETT, University of Toronto

Roman Archaeology - ELIZABETH C. EVANS, Wheaton College

GEORGE M. A. HANFMANN, Harvard University (Etruscan)

W. C. McDermott, University of Pennsylvania

ROBERT S. ROGERS, Duke University

Kenneth Scott, Western Reserve University

MERIWETHER STUART, Hunter College

Louis C. West, Cleveland, Ohio

American Archaeology – Wendell Bennett, American Museum of Natural History VLADIMIR J. Fewkes, University Museum, Philadelphia

GEORGE C. VAILLANT, American Museum of Natural History

U.S.S.R.- HENRY FIELD, Field Museum of Natural History

EUGENE PROSTOV, Iowa State College

Christian - Franklin B. Krauss, Pennsylvania State College

Mediaeval and Renaissance - EMERSON H. SWIFT, Columbia University

Francis J. Tschan, Pennsylvania State University

NECROLOGY

Giuseppe Gerola.-In Felix Ravenna xlviixlviii, 1938, pp. 94-100, an obituary article commemorates the late Giuseppe Gerola (born 1877, died 1938). On completing his higher education at Florence, he was first appointed Director of the museum and library of Bassano and later became Inspector of Monuments at Verona. He interested himself especially in Venetian history and art and, on his first mission to Crete, gained distinction for his study of the Venetian monuments of the island. This mission was later repeated and extended to include the Dodecanese, the resultant historical and critical publications bringing him scholarly fame and the award of one of the "Premi Mussolini." He was transferred to Ravenna in 1910 and spent the ensuing decade on the study and restoration of its monuments, having also under his care the provinces of Ferrara and Forlì. Particularly important were the excavations and studies which he made of S. Vitale and S. Apollinare in Classe, and scarcely less so his restorations of S. Francesco and S. Giovanni Evangelista. In 1911 he founded the well known Felix Ravenna and published in its pages many articles covering a wide range of subjects. During the war he saw to the protection of the monuments under his charge and in 1917-1918 directed the evacuation of works of art from Mantua and other cities threatened by the Austrian advance. Later he undertook the repair of S. Apollinare Nuovo which had been damaged by an enemy bomb. After the war he was appointed Superintendent of Monuments in the Trentino region, where many important restorations were carried out under his direction. The obituary article concludes with a list of Gerola's writings on Ravenna, published separately or in reviews other than Felix Ravenna.

Philip Haldane Davis.—On February 20, 1940, Philip Davis died at his home in Pough-keepsie, New York. Born March 10, 1902, he

received his B.A. degree from Princeton in 1921, his M.A. in 1922, and his Ph.D. in 1930. He was a Fellow for two years at the American School of Classical Studies in Athens, where he became particularly interested in architectural archaeology. He was Associate Professor of Greek and Latin at Vassar College from 1927, was made Professor in 1930 and became Chairman of the Department of Greek in 1937. Nearly ten years ago he took up the study of Greek building inscriptions, with the aim of ultimately producing a corpus of this material. Since then numerous studies have appeared on inscriptions relating to Eleusis. Athens and Delos, He spent a year, principally in Delos, studying stones on the spot and collecting squeezes. He was much interested in music, literature and drama of all times and for some years had been collaborating with other departments at Vassar in a course on Classical, Renaissance and Modern drama. His death leaves unfinished a book entitled: "The Greeks Had a Past."

Antal Hekler. - The Hungarian archaeologist, Antal Hekler, died on February 3, 1940. He was born in 1882 and was educated in Budapest and Munich Universities. He was lecturer in Classical Archaeology in Budapest University in 1913; Keeper of the Classical Collection of the Budapest Museum of Fine Arts, 1914; Director of the Hungarian Institute, Constantinople, 1916; and Professor in Budapest University since 1918. He had been a member of the Hungarian Academy of Science since 1923 and a member of the German Academy since 1938. Among his leading publications are: Römische weibliche Gewandstatuen: Bildniskunst der Griechen und Römer (English translation: Greek and Roman Portraits); Die Kunst des Phidias; Budapester Antiken, Part 1, Die Sammlung antiker Skulpturen; Michelangelo und die Antike; Budapest als Kunststadt; Ein neues Platonbildnis in Athen und die Platonstatue Silanions; Ungarische Kunstgeschichte; Bildnisse berühmter Griechen.

GENERAL AND MISCELLANEOUS

Mesolithic (?) Magical Ornament.—In Fornvännen 34, 1939, pp. 193 ff., Miss E. Hultén claims that all typical decorative motifs so far as known from Maglemosian artifacts, chiefly of bone and antler, are copies of sewing seams. She further maintains that the Maglemosians equated seams with strengthening, and therefore assigned magical significance to artifacts decorated with such imitations. The same idea was eventually transferred to amulets in order to assure the owners of strength. Such elements of Maglemosian art as do not conform to the assumed concept, are attributed by Hultén to importations from Neolithic sources.

Hungarian Neolithic.—Some eighty tombs and many Wohngruben have been found in the excavations at Zengörarkony, Hungary. Twelve contracted skeletons are very well preserved. Among the objects found painted pottery prevails. This culture is considered to be connected with the Theiss culture of the late Neolithic period (J. Dombay, Germania xxii, 1938, pp. 215–218).

Neolithic Discoveries in Gothland.—In Fornvännen 34, 1939, pp. 171 ff., M. Stenberger describes the Neolithic material, found some thirty-five years ago at Väte on Gothland, comprising one stone battle-axe, six perforated pig incisors, and an antler dagger. All these finds belong to a late phase of the passage grave period. The axe has a boat shape and is a rare phenomenon. The perforated pig incisors are rather common, whereas the antler dagger is unique. It appears that Gothland was subject to cultural influences, but not necessarily to migrations, from the area of the battle-axe development situated farther to the west.

Origin of Hunsrück-Eifel Culture.—In the first article of the Bonn. Jahrb. 143–144, 1938, E. Neuffer (pp. 1–46) discusses the pottery of the Hunsrüch-Eifel development in the late Hallstatt period. Schumacher's conclusion that the changes in pottery at this time could be ascribed only to the arrival of a Celtic race from France is disputed. On the basis of museum material and a small group of finds from systematic excavations Neuffer seeks to show that all the characteristic features of Hunsrück-Eifel pottery except one have prototypes in the local ware. There is, therefore, no material basis for assuming the arrival of a new race at the beginning of the Hunsrück-Eifel period.

An Urnfield Cemetery.—P. REINECKE comments on the fallacy of archaeological statistics prompted by the recent discovery of a cemetery of urnfield culture near Höfen, Middle Franconia. Such cemeteries, cut into the rocky plateau of the Jura, had hitherto eluded observation in the North Bavarian region (Germania xxii, 1938, pp. 231–235).

Bronze Age Tumuli. - A. KROLL examines four tumuli of the late Neolithic or Early Bronze Age, as well as the later tombs of the Radberg cemetery. The three chief types are smaller tumuli surrounded by a circular trench, tumuli surrounded by keyhole shaped trenches, and elongated tombs. Most of these contained urn burials. but ash deposits are also common. The circular tombs seem to mark an earlier phase; their form is derived from the large tumuli of the Early Bronze Age. Since other burial customs of the large tumuli are also continued in the circular trench tombs, continuity of tradition from Early Bronze Age to the urn-burial phase must be considered possible (Germania xxii, 1938, pp. 78-91; 225-230).

An Uppland Cemetery. - In Fornvännen 34, 1939, pp. 1 ff., G. Екногм describes a cemetery of the first century A.D., situated near Valloxäby, lying upon a moraine ridge, and containing some one hundred and thirty graves. Forty-five graves are marked by standing, upright stones; the others are individually recognizable by a stone paving which is mostly round, and less frequently either rectangular or triangular in plan. Thus far only eleven graves have been excavated, and these date from the first century A.D. The furniture comprises fibulae, shears, knife-blades, and needles (all of iron), one restorable pottery vessel, and miscellaneous sherds. Two fibulae are of the La Tène II type and thus suggest a pre-Roman date. The bulk of the material, for which numerous analogies are known in the vicinity of Uppsala, suggests that cemeteries of this kind are to be attributed to the Suioni as identified by Tacitus.

EGYPT

Libyan Desert Rock Paintings.—In Antiquity xiii, pp. 389—402, R. F. Peel illustrates and discusses previously undescribed rock paintings from two sites near the juncture of Egypt, the Sudan, and Italian Libya. The article is intended to be an appendix to Winkler's Rock-drawings of Southern Upper Egypt.

MESOPOTAMIA

Mari.—Up to the present no fewer than 20,000 tablets have been discovered in the royal palace at Mari. A list of petty kings of northwest Syria and Mesopotamia, with the names of their cities, has been deciphered. It appears that the political orientation of Mari was toward Syria and northern Palestine rather than toward Mesopotamia. Six Hurrian tablets, older by 500 years than Hurrian material from Boghazköi or Ras Shamra, prove the use of the Hurrian language at Mari (PEFQ. January, 1940).

SYRIA

Ras Shamra.—The goddess Anat occupies an important rôle in Canaanite mythology. She appears as wading knee-deep in blood and washing her hands in the blood of the slain. Here we have a parallel to the Egyptian myth according to which Hathor slew mankind. In the Ras Shamra pantheon also appears Yu or Yo, son of the high god El; the question has been raised whether this represents a pre-Mosaic form of the name YHWH (PEFQ. January, 1940).

PALESTINE

NELSON GLUECK contributes an article on Kenites and Kenizzites in PEFQ. January, 1940, maintaining that mining, smelting, and refining operations were carried on along the length of the 'Arabah and the head of the Gulf of 'Akabah as well as in Sinai from the beginning of the early Iron Age, if not already in the Bronze Age. The Kenites supplied the skilled labor in these operations. In all probability the Kenites introduced the Israelites and the Edomites to the arts of mining and metallurgy. There were guilds of various craftsmen and Ezion-geber: Elath was a centre of the iron industry. On account of the connexion of the Kenizzites with the Kenites it is inferred that they too resided in the southern regions of Palestine and Transjordan of which Ezion-geber: Elath was the centre.

Lachish.—A review of the results so far obtained at Lachish is presented by Père Vincent in RB. xlviii, 1939, pp. 250–277, 406–433, 563–583. It is a testimony to the acumen of the excavator, the lamented Mr. J. L. Starkey, that in so few details does the dean of Palestinian archaeologists find cause for disagreement with his conclusions. The principal points of divergence may be summarized as follows: (1) Whereas Starkey

dated the foundation of the outer temple to about 1680 B.C., Vincent would push back its origin a century earlier on the basis of the painted crater found after Starkey's death. (2) Whereas Starkey dated the first alteration of the temple to a period just before the accession of Amenophis III, Vincent would date it after his accession, to ca.1410, on the basis of the pottery and the plaque with his cartouche. (3) Whereas Starkey was inclined to regard the temple as a centre of foreign, probably Phoenician, cult, Vincent sees no reason for regarding it as anything but a pure Canaanite temple dedicated to the worship of Resheph. The rude figurine found in temple III is almost certainly a substitute for the original image of the god. (4) The edifice at the lower southeast corner of the acropolis, which Starkey assigned to the Persian period and whose function puzzled him, is regarded by Vincent as a royal stable, similar to, but smaller than, the famous Megiddo stable. Nothing in the structure definitely suggests the Persian period. It is more probably to be connected with Rehoboam's fortification of the city in the latter part of the tenth century or with the rebuilding which followed Sennacherib's capture of the city in 701.

The culture of the whole Late Bronze period shows no hiatus, only a period of uninterrupted prosperity when the city, under the benevolent rule of the Pharaohs of the XVIIIth and early XIXth Dynasties, reached its apogee of splendor. Then came the devastating Israelite conquest. Starkey, on the basis of a royal scarab and pendant bearing the name of Ramses II, found in the burnt débris of temple III, dated this conquest to the middle of Ramses' reign, ca. 1260 B.C. Albright, on the basis of a hieratic text found in the ruins of the Egyptian palace on the acropolis, would lower this date to 1231-30. Vincent is not convinced by Albright's arguments (see pp. 419, n. 1, and 569), but agrees that the fallsof the city cannot have occurred before the middle of the 13th century. This accords with the results of the excavations at Bethel, Beit Mirsim, and Jericho. But at no site is the dating so beyond question as at Lachish. In view of the close parallelism existing between the Late Bronze pottery of Lachish and Jericho, Vincent maintains that it is impossible to mark its termination at Jericho at ca. 1400 (or ca. 1320 with Albright) and that at Lachish a century or a century and a half later. If Lachish fell ca. 1250, then the Exodus must have occurred earlier in the reign of Ramses II,

between 1290-80 (see pp. 580-582). Père Vincent's dating of the objects bearing proto-alphabetic inscriptions will be of interest to epigraphers: (1) the dagger, not later than 1600 B.C. and perhaps considerably earlier; (2) the ewer and the bowl, between the beginning of the fourteenth century and the first quarter of the thirteenth; (3) the censer, between 1400 and 1275 approximately; (4) the two sherds, first half of the thirteenth century (p. 428).

Hyksos.—Engberg (PEFQ. January, 1940) in his Hyksos Reconsidered concludes that the presence of Hyksos elements in the culture of Canaan can be traced back to the beginning of the second millennium B.C. He finds a cultural interrelation between the Hyksos and Hurrians and maintains that the Hittites and Habiri must be considered in any attempt to estimate the ethnic composition of the Hyksos. Dr. Engberg's view is reinforced by the discovery of the Hurrian element at Mari.

ARABIA

Qatabanian Graffiti.—Sixteen graffiti inscribed on two stones in the Museum d'Histoire Naturelle of Lyons are published by M. G. RYCKMANS in RB. xlviii, 1939, pp. 549–553. They present striking analogies with some graffiti discovered by Landberg at Daman and manifestly come from the same spot. The script of most is archaic; two are written in boustrophedon fashion.

GREECE GENERAL AND MISCELLANEOUS

Archaeology in 1938.—REG. for April–June 1939, LII, 245, pp. 257–300, completes the 1938 Archaeological Bulletin by giving Part II Architecture, Topography. This thorough summary by R. Vallois gives in considerable detail report of the work done under all sorts of auspices in the Hellenic world for the year mentioned. There are five figures in the text. Considerable attention is given to the American work, as reported originally in the Journal.

Neolithic Settlement at Akropotamos.—In Πρακτ. 1938, pp. 103–111, G. E. Mylonas and G. Bakalakis report briefly the results of their excavation of the neolithic sites of Akropotamos in the valley of Nea Pieria and of Polystylo in the plain of Philippi. The first site yielded a great quantity of patterned pottery presenting strong similarities to the so-called Dimini wares, incised pottery belonging to small legged vases, and

plain polished black pottery. Patterned ware is not common on the site of Polystylo, which has yielded a great quantity of monochrome black pottery. Celts, bone tools, and clay figurines were found on both sites. The site of Akropotamos was again inhabited during the fourth century B.c. The cemetery of this later settlement was discovered and explored. It is composed in the main of cist graves of small dimensions, made of vertical slabs, which served as τεφροδόχοι.

Volcanic Destruction of Mînoan Crete.—In Antiquity xiii, 1939, pp. 425–439, Sp. MARINATOS ascribes the destruction of the coast towns of Minoan Crete to an eruption of a volcano on the island of Thera, similar in its effect to the eruption of Krakatau in 1883. The inland palaces, in the author's opinion, were ruined by earthquakes preceding or following the eruption. The author believes that Minoan Crete never recovered from this catastrophe.

Mycenaean Cemeteries in Achaia.—In the region of Patras N. Kyparisses continued his investigations of the Mycenaean cemetery which perhaps belongs to the ancient city of Antheia. Four graves were cleared in the summer of 1938 and yielded a great number of Late Helladic vases, a bronze sword, a bronze spear-head, and fragments of bronze daggers (Πρακτ. 1938, pp. 118–119).

Eleusis and its Sacred Way. - KOUROUNIOTES and TRAYLOS report briefly the results of the investigations they carried out in 1938 of the sacred way and the sanctuary of Demeter at Eleusis in Πρακτ. 1938, pp. 28-40. The sacred way has been traced to a distance of 1500 meters to the west of the Sanctuary of Aphrodite. Three separate layers of street surfacing were revealed in places and in others flat stones were uncovered set in a line and serving as guides for the construction of the "strosis." The width of the road amounts to 4.80 m. At a distance of 1200 m. from the sanctuary of Aphrodite were discovered the remains of a "peribolos," enclosing graves apparently belonging to the fourth century B.C. Parts of the "pyre," used in connection with these graves, was found below the road and this will furnish a valuable chronological datum for the date of the construction of the road itself.

At Eleusis they continued the exploration of the deeper layers below the "lepà olkía" and especially below room A. The remains of structures belonging to geometric times were uncovered and it seems that the "'lepà olkía" was built at the

end of the period represented by these remains. Towards the south end of the area a geometric grave of a youth was found, covered by a small "tymbos" which, with the other evidence obtained, proves the existence at this place of a cult of the dead in geometric times. The most important find of the year was the discovery of a large rectangular structure, apparently belonging to the fourth century B.C., to the east of the Greater Propylaea and of the temple of Artemis. Only part of the structure was uncovered because most of it lies below modern houses. Its dimensions, however, can be determined. Its length is 62 m., its width 42 m., and its side walls are preserved to a height of one meter. The use of the building is uncertain. It could be the "temenos of Triptolemos" (Paus. i, 38, 6), or the "δόλιχος" of IG. ii² 1672, or a "πομπεῖον" where processions, similar to those mentioned in IG. ii² 1673, were prepared. At any rate it is one of the most significant buildings of Eleusis. A "Mycenaean" cemetery was also found on the northern slope of the hill with the Frankish castle. Four of its graves were cleared. They are cists made of upright slabs, have large dimensions (the largest measured 3.55 x 1.12), but few furnishings. The latter will place them in the L H II period. The cemetery was used in the geometric and in the historic periods and from graves of these periods were recovered a number of beautiful white-ground lekythoi and figurines.

Sikyon. - A. Orlandos reports briefly the results of his 1938 excavations at Sikyon in Πρακτ. 1938, pp. 120-123. The further excavation of the Gymnasium revealed the northern spring house, the central stairway, and the retaining wall between the lower and the upper balconies. The southern side of the Bouleuterion was completely uncovered and it was found that its lower courses were in their original position. It will be possible to restore this side to a height of 1.84 m. To the west of the temple of Artemis were found the foundations of a large porticoed building with a projecting wing at its southern end and a semicircular exedra behind its center. To the south of the temple was found the base of a bronze statue bearing the inscription L[ucius] Cornelius L[uci] f[ilius] Sulla imper[ator] Martei. This seems to indicate that Sulla erected at Sikyon a statue of Ares after 82 B.C. To the east of the village Vasilikon and near the chapel of St. Constantine in a vineyard was found a mosaic pavement made of sea pebbles and dating from the fourth if not from the end of the fifth century. In a central circle are preserved the figures of three animals galloping and beyond this in a broad zone are pictured centaurs running and holding in their left hands branches of trees. It is to be noted that such mosaic pavements were found before in this district and this may suggest that before the days of Demetrius Poliorcetes the older city was located on the eastern slopes of the plateau on which was built the new Sikyon.

Eleutherae Panaktou.—A new investigation of the fortification walls and towers of Eleutherae Panaktou is reported by the architect Eustathios G. Stikas in Πρακτ. 1938, pp. 41–49. A fuller diagram of the "peribolos" wall and of its course, of the rectangular building within it and of the "peridromos" along the entire length of the fortification walls has been obtained and is given in a carefully drawn plan. In the "rectangular building," constructed in polygonal style, a number of glazed spherical lamps of the classical period was found. Near it the foundations of other smaller houses were uncovered. The work will be continued until the final plan and all the details of this fortified post are completely cleared.

Western Macedonia. - In 1938 A. D. KERA-MOPOULLOS continued his exploration of Western Macedonia and the important results of his work are briefly stated in Πρακτ. 1938, pp. 53-66. In the course of this exploration remains of ancient settlements and cemeteries were located at Saranda Gortses (near Tsotylion), at Peristera, at the site of Karakasi near Aidonochori, at Spachtolos, at Neapolis, at the Orestic Argos, at Nestorion and at Tsouka. In the last two villages were found and collected a number of smaller antiquities, the more important of which are a bronze statuette of a seated Hermes (from Nestorion) and a bronze statuette of a youthful satyr (from Tsouka). Perhaps the most important find of the year was the discovery of the remains of Pile Villages in the lake of Kastoria. The latest villages belong to the reign of Archelaos, but these were proved to have been built over earlier settlements, the earliest of which seem to go back to the neolithic period. This early date is proved by the crude pottery and the stone celts discovered in their rubbish heaps. The finds further indicate that the neolithic period at this particular area lasted longer and perhaps well into the Middle Helladic chronological limits.

Excavations at Kavala.—G. BAKALAKIS reports on the excavations which he carried out in 1938

in the region of Kavala in Πρακτ. 1938, pp. 75-102. In the town itself the hieron of the Parthenos was further investigated and more architectural fragments of the Ionic peripteral temple of the Goddess were found. A great quantity of sherds was also found in pure layers of the archaic period and on one of these the inscription [Τλέσον ho Νεάρινο ἐποίεσείνι could be restored. At a distance of four miles from Nea Heraklitsa a cave was explored and it has yielded a quantity of sherds. The earliest, crude, handmade vases seem to belong to the neolithic period. The majority belongs to the sixth century, although Hellenistic wares were also found. One of these bears a dedicatory inscription. On a fragment of a skyphos the inscription N]ΥΜΦΑΙ[Σ could be restored, indicating the existence of a Nymph cult in the cave. This was further proved by the inscription on a stone rectangular base which reads: Νύμφαις ἀνέθηκέ με, etc. The area between Kalamitsa and Galepsos was also explored and the location of Oisyme was definitely established. The walls of its citadel at places are well preserved and their attribution is established. On a stamped amphora handle discovered in the citadel we read $OI\Sigma YMAI \omega N \Pi ANTIM[O\Sigma]$.

Amnisos (Crete). - Sp. Marinatos reports briefly his work at the site of Amnisos in Πρακτ. 1938, pp. 130-138. The deep filling of the site was investigated again and was proved to be formed of three distinct strata. The first belongs to the Roman and Early Christian period. The second is composed of clean sand and the third is black in color and contains a great quantity of burned and unburned animal bones and artifacts. The long Minoan wall of the site was revealed to a length of 44 meters. It appears that its northern end was constructed in the M M period, while its extension may date even from L M III times. On this Minoan wall and in Hellenistic times was based another, which like the Minoan proceeds in a straight line and thus far showed no turning points. In front of this wall and at its entire length were found traces of a hypaethral shrine, where ashes and carbonized remains of bones and offerings are very evident. Near the Hellenistic wall was also found a small sacrificial bothros full of carbonized bones and fragments of pottery. About the center of the area occupied by the hypaethral shrine but over the layer of sand, were found remains of dwellings belonging to the Roman period. From them were obtained a quantity of lamps, fragments of Arretine ware, fragments of bronze articles and a stone eagle, of life size, standing on a base faced with volutes. Among the inscriptions belonging to the historic period is one which reads: ΟΙ κόσμοι οΙ σύν ύπερ[γένει τῷ κ|οίχιος Τηνὶ Θε]νάτα. This proves that the God worshipped in the shrine was Zeus Thenatas, the adjective Thenatas derived from the name of the city Θενῶν in Crete. This inscription will help restore another found in 1934 in which Zeus Thenatas is again mentioned. Professor Marinatos convincingly proves that this Zeus is the Κρηταγενής and this purely Cretan character of the God will explain the very long life of his cult, which continued at Amnisos without any interruption from Minoan to Late Roman times. The inscriptions also help locate the site of Thenae, of the Omphalion plain, of the river Triton and of other points of interest in the topography of the region of Amnisos.

Anthropological Investigations.—In ZfE. 71, 1939, pp. 116 ff., T. Koerner describes his anthropometric studies of one hundred and forty male adults and sixty school children at Monemvasia, and twenty-one male adults at Areopolis. Blondism is typical of some forty per-cent of the children; after fourteen years of age, however, dark hair predominates with both sexes. The adult male population is described as brachycephalic, leptoprosopic, and hyperchamaerhin; it cannot be assigned to any single racial type. While the Mediterranean strain appears to be most prominent, there is a considerable admixture of the Hitherasiatic, more or less recent, influx from Anatolia.

ARCHITECTURE

Temple of Ares at Athens. - In Hesp. ix, 1940, pp. 1-52, W. B. DINSMOOR reconstructs the temple of Ares at Athens. Thompson's analysis of the foundations of a large building in the northwest quarter of the Agora favors a date in the early Roman period. The identification of the temple with that of Ares agrees with Pausanias' description. Dinsmoor derives from a triglyph, from foundation blocks, and from other fragments the inference that the temple had six by thirteen columns, measuring about 14.51 x 34.04 m. on the frieze. It was erected in the age of Pericles (as indicated by the workmanship), but reconstructed four centuries later (as shown by the Roman dowel-hole and the Augustan letters AO on the top of the triglyph, obviously intended to permit reconstruction in proper sequence after dismemberment). Moldings and peristyle ceiling-beams discovered in this area show a close similarity in style to the "Theseum" (449-444), the temple of Poseidon at Sunium (444-440), and the temple of Nemesis at Rhamnus (436-432), so that all four can be assigned to a single architect, whom he calls the "Theseum" architect. The temple of Ares would date between Sunium and Rhamnus; i.e., about 440-436. It may be imagined with lion head spouts along the entire side rather than merely at the corners as in the Parthenon; with pediment sculptures; and with golden Nikai on the roof. Such a temple actually figures on a calyx-crater of the late fifth century at Würzburg, where the pedimental sculptures are combatants, unidentified, on foot and on horseback, dominated by Athena. The building would have stood originally not far from the Anakeion, where military assemblies were held. After the Roman Agora was begun, about 47 B.C., the temple was removed to a new site, doubtless with funds secured from Augustus.

INSCRIPTIONS

Athenian Agora.-In Hesp., ix, 1940, B. D. MERITT (pp. 53-96), and W. K. PRITCHETT (pp. 97-133) continue the publication of inscriptions from the Athenian Agora. Meritt publishes (1) new names of trittyes, with new assignments to tribes; (2) a list of phylarchs of the fourth century; (3) a dedication, dating before 350, to Athena Ergane; (4) a list of ephebes of Leontis, dated 333/2; (5) a join with IG. ii², 463 (307/6), on repairs to the walls of Athens, with a list of bondsmen and contractors; (6) a prytany list, to be added to Dow's publication ("Prytaneis," Hesp., Suppl. 1), with proof that all the demes of the Macedonian tribe Demetrias did not come from tribes V-X in the official order; (7) a letter (ca. 37/6) from the genos of the Gephyraioi to Delphi, presenting credentials, with a reply, which proves that in this late period, at least, Athenian nobles could belong at the same time (by adoption, or by inheritance of gentile affiliations through collateral lines?) to more than one genos. Pritchett publishes (1) a dedication in elegiacs, of the mid-fifth century, to Demeter and Kore, found in the Valerian wall and possibly from the Eleusinion; (2) a decree of 302/1, also probably from the site of the Eleusinion, which honors taxiarchs, who preserved order in the sacred rites of Demeter; (3) a join with "Prytaneis," no. 56 (135/4), confirming modifications in the archon tables for 147/6-129/8, of which P. offers a revised list.

SCULPTURE

The Apollo Metope of Selinus.—Heinz Götze in RM. 54, 1939, pp. 66–75, figs. 1–4, Pl. 17, gives a new interpretation of the metope, which until now has been regarded as a simple family union. He sees in it the return of Apollo from the Hyperboreans, and his welcome by his mother Leto and his sister Artemis, as we know it already from the Melian amphora in Athens (Conze, Melische Tongefüsse, pl. I) and from late red-figured vases (fig. 4 and pl. 17). That is the reason why Apollo wears winged high boots, ordinarily characteristic of the messenger Hermes.

The Parthenon Master. - B. Schweitzer in JdI. liv, 1939, pp. 1-96, elaborates and reinforces the conclusions of an earlier paper (abstracted, AJA. xliii, 1939, p. 681), in which he investigated the method and sequence of the sculptural work of the Parthenon and found that the course of procedure indicated control by one individual almost, if not quite, throughout. Here he seeks to define with greater precision the persistent ingredients and the continuous thread of self-integrating growth in the style of this designer through the successive phases marked by (1) metopes (patterned movement); (2) the short . friezes and east pediment (static composition); (3) long friezes and west pediment (dynamic composition). In this threefold distinction of rhythm there is not casual difference but evident harmony. And the unity of the Parthenon sculptures is discernible in more than this general impression of an elaborately organized whole of manifold matter and various manners. Close and objective scrutiny of the particular motives, the physical types, the various patterns of detail, the minor and major devices of composition, reveals a surprising number of constants. This continuity is fatal to a theory of mere accretion, and it is far more reasonable to see in the "novelties" of the last phase the maturity of the designer of the metopes. Without mentioning the name of Pheidias, the author tacitly invites us to attach it to the Parthenon Master, who, as he finds, was a practised sculptor in the round, not without knowledge of the painter's craft, and a genius of altogether transcendent power.

The Ex-Voto of Attalos at Athens.—The date of the four groups dedicated by an Attalos on the Acropolis of Athens have recently been much discussed. Particularly important are the papers by Schweitzer (Abh. Leip. Akad. d. Wiss. 43, 1936, 4, pp. 96 ff.), who dates them soon after 200 B.C. and thinks that they were begun by Attalos I (241–197) and finished by Eumenes II (197–159); and by Horn (RM. 52, 1937, pp. 150 ff.), who dates them in the time of the two last Attalids, Attalos II (159–138) and Attalos III (138–133). Another much discussed problem is, whether these groups are the end of the style of the third century or the beginning of a new style making them the models for many later compositions particularly in reliefs.

Arnold Schober, in RM. 54, 1939, pp. 82–98, figs. 1–3, takes these problems up again, which he had already attacked in JdI. 53, 1938, pp. 137 ff. He had shown there that Roman relief vases do not go back to the smaller but to the larger Pergamene votive groups of Attalos I, while the smaller groups themselves go back to the older works which he connects with Epigonos. With Horn Schober also dates the smaller groups later than the great altar.

For the reconstruction of the groups Schober refutes the assumption of Schweitzer (JdI. 51, 1936, pp. 158 ff.), that the groups of Amazons and the other groups had no adversaries. Each of them must have had victorious and defeated figures as well. For the gigantomachy the Dionysos which was thrown down from the Acropolis during a thunderstorm testifies to the victors. Therefore SCHOBER assumes that the four riding Amazons (Patrizi, Anzio, Naples and Villa Borghese), united by Schweitzer to a group of ca. 140-120 B.C., do not go back to any other work than the Amazonomachy of Attalos. This Attalos was probably Attalos II, who also dedicated the stoa in the Agora of Athens and to whom the Athenians dedicated a colossal statue together with his brother and predecessor Eumenes II. Both probably stood on the Acropolis near the ex-voto. Later the statue was rechristened Antonius and the statue of Cleopatra was added. The same thunderstorm which threw down the Dionysos of the votive groups upset the colossal statue also.

The four artists which Pliny names as authors of victory monuments over the Gauls have been dated by Schober in the second century B.C. (JOAI. 31, 1938, pp. 142 ff.). He now tries (pp. 89 ff.) to find four different individual styles in the copies of the four groups. Several artists worked together on each group. Stratonikos from Kyzikos, Antigonos and Isigonos from Pergamum

may represent the Asianic baroque, while Phyromachos from Athens represents the conservative classicism. The bronze originals must have stood in Pergamum. Schober recognizes their base in numerous fragments from the time of Attalos II (fig. 13). It was ca. 50 centimeters high, 60 cm. deep and four times 10 meters long. It thus was well adapted to sculptural groups of two-thirds life size. A copy of these bronze groups was sent to Athens.

Late Hellenistic Reliefs.-There are many names of artists from the island of Rhodes and the dates of many have been fixed by Hiller von Gaertringen (JdI. 9, 1894, pp. 37 ff. and RE. Suppl. v, 808, s.v. Rhodos) and Blinkenberg (Bull. de l'Accad. roy. de Danemark 1905, pp. 80 ff.). But with the exception of the Laocoon group by Agesander, Athenodoros and Polydoros, dated ca. 50 B.C. (cf. recently Valentin Müller, Art Bulletin xxi, 1938, p. 410 f.) and some late Hellenistic statues of women from Rhodes and the neighboring island of Cos (Bieber, Antike Plastik, Festschrift für Walter Amelung, pp. 16 ff. figs. 1-9, pl. 3) very few works of art have been connected with definite artists or with the definite Rhodian school. LUCIANO LAURENZI in RM. 54, 1939, pp. 42-65, figs. 1-6, pls. 11-16, dedicates a careful investigation to Rhodian sculpture. By comparing the well known dedicatory relief, Munich 206 (pl. 11; Bulle, Der schöne Mensch, 279; Lawrence, Later Greek Sculpture, p. 24, fig. 41 a) with two reliefs (figs. 3-4) and several altars found in Rhodes and thus definitely local products of Rhodian artists, he can add this relief and the "Ariadne" in Florence and the Louvre, (pl. 12 and fig. 2), who is repeated on the relief, to the Rhodian school of the second half of the second century. Both the Munich relief and the Ariadne have hitherto been dated too early-between 300 and 200 B.C. The seated god of the Munich relief is repeated on the two Rhodian reliefs. On one (fig. 3) he is meant to be Zeus-Serapis and next to him the goddess Isis is standing. This figure again occurs in a statuette from Catajo now in Vienna (pl. 13 and figs. 5-6), which also can be dated with the help of the stylistically related frieze of Lagina into the second half of the second century A.D. LAURENZI furthermore tries to identify her model with the Isis of Athenodoros I, dated 180-100 B.C., whose Isis was later set up in Rome (p. 53 f.). This Athenodoros I may be the person who also created the portraits of noble women (Pliny 34, 86). Thus LAURENZI would like to attribute to him such creations as the "Pudicitia," also used for the type of the mother on the Munich relief, and the portrait statues of women in the Odeion of Cos (pl. 15; CR. v, 2, pp. 115 ff., fig. 22, pl. 10). Other contemporary figures are the Cleopatra of Delos, dated after 138, and the relief of Archelaos of Priene. All these and leaning female figures (the five principal types are discussed on pp. 58 ff.; cf. pl. 16) show a mixture of late baroque and early academic classicizing tendencies characteristic of the period, 150–100 B.C.

Hellenistic Model for Terracottas.—The Hellenistic statue of a seated girl, known in a Roman copy in the Palazzo Conservatori, was transformed into Fortune in terracottas made in Cologne in the second century A.D. The motif may have been transmitted through small bronze copies (Louvre: De Ridder, 1081). H. Schoppa, Germania xxii, 1938, pp. 240-244.

VASES

Inscriptions on Greek Vases. - In RendLinc. xiv, 1938, pp. 93-179, S. Ferri discusses the interpretation of καλός-inscriptions. He limits very strictly the use of the explanation which postulates an erotic significance, and likewise he denies, except in a few cases, the validity of the identification of καλός-names with historical characters. He argues that the καλός-inscriptions have a funerary significance: the adjective applies to the deceased, and the vase bearing the inscription was part of the furniture of his tomb. The word was especially appropriate in the case of one who died young, and bears witness to the peculiar effect such bereavements had on the imagination of the ancients: such a youth might also be referred to as άρπασθείς or ποθεινός. Similarly inscriptions like xaipe or mive possess, besides their convivial significance, a funerary significance also: for several centuries it was the custom at the symposium to invite the dead to take part in the drinking. The use of such inscriptions may equally well be derived from the custom of pouring libations to the dead. Pages 158-179 contain the testimonia on which the argument is based.

ITALY

GENERAL AND MISCELLANEOUS

Rock Paintings in Val Camonica.—Franz Al-Theim and Erika Trautmann in RM. 54, 1939, pp. 1–13, figs. 1–6, pls. 1–2, have studied a series of rock paintings, which, in their opinion, represent a great picture book of ancient Italian history. The representation of a dagger (pl. I, 1) shows a purely Celtic shape. The figure of a god adored by a man (fig. 1) is that of the Celtic god Cernunnos, as testified by the antlers of a stag. A man shooting with his bow against a "whirl" (fig. 3 and pl. I, 4) is a Celtic imitation of a Corinthian representation of Herakles fighting the hydra, like Payne, Necrocorinthia, p. 126, fig. 45. The problem is similar to the one of the stele from Fano, for which A. von Salis ("Neue Darstellungen griechischer Sagen, ii, Picenum," in Abh. Heidelb. Akad. d. Wiss. 1936-37, pp. 6 ff., pl. 1) recognized the models in Greek archaic vase painting. The horse (fig. 4) also has his forerunners in Corinthian horses, like Payne, Necrocorinthia, figs. 18 F and 19 A. The figures of stags and hinds (figs. 5-6), however, are again purely Celtic. They go back to Scythian motives of the sixth century B.C. The Celts brought them to Italy in their wanderings. As they did not settle in the eastern part of northern Italy before 350 B.C., the rock paintings from Val Camonica cannot be older than this date.

The Volsci in Latium.—In Athenaeum xxvii, 1939, pp. 233–279, E. Manni looks for remains of the Volsci in Latium, their farthest limit of expansion, and finds them chiefly at Velitrae, where the Tabula Veliterna shows traces of their political influence, and in the high valley of Liri, where there are traces of the cults of Saturn and of Silvanus, both of whom are identifiable with the Umbrian Cerfo Martio. Tombs and cyclopean walls also furnish some evidence of an archaeological nature.

Funeral Cars in the Western Provinces.-In prehistoric times the belief was widespread among Celtic and Illyrian peoples that in the afterlife the dead accomplished a journey by means of chariot. Chariots were placed in many of the tombs. This custom survived in Gaul, Panhonia, and Thrace, as late as the second and third centuries A.D. But then the ancestral belief had become contaminated with Dionysiac conceptions: the decoration of the funeral cars and also of the harness regularly employs Bacchic motives. In L'Ant. Class. viii, 1939, pp. 347-359, A. Alföldi discusses these funeral cars, apropos of a small bronze column surmounted by a winged bust of Bacchus in the archaeological museum at Turnhout. This period saw a renaissance of the metalworking industry in Gaul, and it was on the industrial centers of Gaul and Germany that the Danubian countries depended for the decorative trappings of enameled bronze which they used to adorn their harness.

Roman Military Camp. - August Oxé (Bonn. Jahrb. 143-144, 1938, pp. 47-74) deals with the measurements and plans of the Polybian and pre-Polybian military camp. He believes that Polybius changed the Roman measurements into Greek for the benefit of Greek readers. The original type for a consular army of two legions was a square, one-half mile (2500 feet) on a side. When two consular armies acted together the camp had the length of a mile, while the width remained half a mile. In the early square type, the Praetorium, Quaestorium, and Forum lay between the two legions. In the rectangular form the headquarters were placed in front of the legions or the cavalry was placed in front and the staff between. From the rectangular type was developed the difference between the mobilization and permanent camp and the march or war camp. The width and disposition of the streets are taken up at some length. A series of plans illustrates the successive and various forms.

Invasion of the Cimbri.—The time of the conquest of the Etsch pass in the Alps by the Cimbri is the subject of an article by EMIL SADÉE (Bonn. Jahrb. 143–144, 1938, pp. 75–82). He thinks that a crossing of the mountains by a whole tribe in midwinter is impossible. Two possibilities remain: either they crossed the Brenner and other passes in 102 and wintered in the high valleys just to the south, or storm troops in groups of a thousand worked over the passes in the winter and secured the route. In any case the main body did not cross the defiles into Italy until the spring of 101 B.C. when the passes were free.

A Roman Bronze Lid.—A hare in the center, flanked by two grapes; then a circle of six pigs; and another of twelve pieces of fowl: these gastronomic bits are represented on a bronze lid of the third century A.D. found in the Gallo-Roman dwelling near Mundelsheim. (O. Paret, Germania xxii, 1938, pp. 104–5). P. Goessler (ibid, pp. 253–4) appropriately refers to Petronius, Cena 36, and Lucian, De hist. conscr. 20, for the same tasty combination of animals in gastronomic literature.

ROMAN ARCHITECTURE

Caesar's Bridge Over the Rhine.—An early interest in Caesar's bridge over the Rhine led K. Saatmann to make, with the assistance of

E. JÜNGST and P. THIELSCHER, an extensive study of its construction (Bonn. Jahrb. 143-144, 1938, pp. 83-208). With the experience of a practical engineer, he studied the middle Rhine in the vicinity of Bonn, its depth in high water (midsummer) and in June when Caesar crossed; its rate of flow, 1.40 m.-1.70 m. per second, etc. He believes that Caesar's sublicae are the upright piles placed along the direction of the current and linked together above by the fibulae beams. The ends of the fibulae are secured by the tigna bina, placed obliquely in the stream to prevent them from swaying with the current. Between the fibulae lie the tigna, which constitute the basic pavement of the bridge. Much of the confusion in the interpretation of the Latin of Caesar is due to the fact that he does not attempt to describe all the details (and so leaves out all mention of pavement and railing) but only features which distinguish his bridge from the ordinary type.

INSCRIPTIONS

A Dedication to Fortune.—In Athenaeum xxvii, 1939, pp. 227–232, A. Degrassi discusses the dedication to Fortuna melior on a shield in the Treasure of Marengo now in the Turin Museum. This goddess is already known from other inscriptions, which are listed by the author. By means of the name of the dedicant, M. Vindius Verianus, who is likewise known epigraphically, the inscription can be dated after 198–201 A.D. This gives additional proof that not all of the pieces of the treasure are of the same date.

PAINTING

Incrustation and Wall Painting. - OTFRIED DEUBNER in RM. 54, 1939, pp. 14-41, figs. 1-10. pls. 3-10, compares and discusses the two remarks of Vitruvius vii. 5, 1 and Pliny xxxv, 2, on Roman wall decoration. Vitruvius describes the origin of wall decoration (expolitio) from imitation of the construction of marble incrustation. Pliny says that wall painting (he means of course figurative wall painting) has been pushed into the background by marble incrustation. Deubner thinks that they are speaking of different kinds of decoration, Pliny in public buildings, Vitruvius in private houses. It seems, however, more likely that the difference is a chronological one. Vitruvius discusses the beginning of interior decoration before his time in the so-called first style; Pliny discusses the marble decorations of his time, i.e., almost 200 years later, when figure painting in monumental style had indeed almost died out. -Deubner investigates the perpetual mutual exchange between painted decoration and incrustation, assuming a permanent influence of the latter on the first. He describes at length the motives of incrustation in Herculaneum (fig. 3: Maiuri, Ercolano, p. 108, fig. 69), the library of the Asklepieion of Pergamum (fig. 4), the ancient thermal bath of Pasa Ilica east of Pergamum (pl. 4. Altertümer von Pergamon, i, 1, pp. 131 ff.) and the late examples of the Basilica of Junius Bassus, consul in 331 A.D. and of the Mausoleum of Constantina (figs. 5, 7, 9), both preserved only in Renaissance drawings. Motives of different earlier styles are mixed up with each other in these late Constantine examples. Deubner thinks that many of these motives originated in incrustation and that incrustation influenced the change from the architectural second style to the unreal fantastic style of the Augustan and of later periods.

Potters' Stamps.—Inscriptions of vases from the Titelberg in Luxembourg (Erpelding Collection) are discussed with his usual mastery by A. Oxé. Most are early, parallel to the material from Mont Beuvray. They include: Italian sigillata (Sex. Petronius; A. Sestius Pila; L. Titius Copo; Aulus Vibius; Cerdo Scauri; P. Attius; Felix Sentius; Onesumus); thirteen Belgian stamps; and an Aco bowl. SER.P. is to be read servus publicus in a dedicatory inscription of the same collection (Germania xxii, 1938, pp. 236-240).

SCULPTURE

Iconographic Studies. - Curtius continues his iconographic contributions to the portraits of the Roman republic and the Julian-Claudian family (begun in RM. 47-50, 1932-1935) in RM. 54, 1939, with No. IX, portrait of Marcus Antonius pp. 112-121, figs. 1-4 and No. X, father of Livia?, pp. 121-129, figs. 6-12, pls. 25-28. Arias supplements his studies with one on Octavia, sister of Augustus, wife of Marcus Antonius, ibid., pp. 76-81, figs. 1-4, pls. 18-22. - Curtius identifies a portrait in Berlin with the help of a gold coin of Marcus Antonius. He attributes it to the same artist as the portrait of Agrippa. The father of Livia is recognized in a bust from the Casa degli Amorini Dorati by the resemblance to his daughter Livia in her portraits in Copenhagen and in the statue from the Mystery Villa at Pompeii. Arias studies the portraits of Octavia from the point of view of chronology. While the well known portrait in the Louvre, one in Bonn and one from Carthage show her very young, others from Butrinto and Palestrina (fig. 4, pls. 19–20) portray her when about 30–40 years old with larger and more personal features after the loss of Antonius and her son Marcellus (died 28 B.c.), while others like the one from Crete in Athens (pl. 22) probably go back to one of the many official and therefore more majestic portraits set up to her by Augustus (Cf. Plutarch, Antonius, 31).

A Problem of Precedence. - A fragmentary relief found on property of Prince Aldobrandini very close to the Ostia excavations shows, toward the left edge, the bust of Lucius Verus. This position is very strange in view of the inscribed date of the monument (160 A.D.) and of its original form, with busts also of the emperor Antoninus Pius and his heir Marcus Aurelius. Why is the place of honor, on the emperor's right, given not to the Caesar Marcus but to Verus, then his inferior? H. Fuhr-MANN in AA. 1939, cols. 294-302, suggests that a special connection with Ostia may have entitled Verus to precedence locally. Perhaps the "L. Caesar Augusti filius" known to have been honorary duovir of Ostia is not Verus, but rather his father, L. Aelius Caesar, or his nephew, Commodus. Nevertheless it is not unlikely that Verus too received this honor.

Lar.—A bronze figurine of a Lar in the Kurpfälzisches Museum, Heidelberg, is published by G. Hafner. He surveys the interpretations offered for the "Lar" types and advances some suggestions about their dating (Germania xxii, 1938, pp. 97–100).

Ceremonial Headdress.—An altar of 164 A.D., now in the Rheinisches Landesmuseum of Bonn, portrays two goddesses with immense round hats or hairdress. An investigation of this peculiar feature leads E. BICKEL (Bonn. Jahrb. 143–144, 1939, pp. 209–220) to the conclusion that it should be interpreted not as a degenerate form of Roman art, nor as a special form of the matron's garb as opposed to that of the unmarried girl, but as a symbol of the vegetation goddess at the time of the spring festival. It is a survival of the old German vegetation cult as opposed to the Celtic-Roman cults of neighboring regions.

EARLY CHRISTIAN AND BYZANTINE

Early Christian Bases and Capitals from San Paolo fuorile Mura. — FRIEDRICH WILHELM DEICHMAN and ARNOLD TSCHIRA in RM. 54, 1939, pp. 99–111, figs. 1–11, pls. 23–24, publish the ancient architectural fragments set up near the

rebuilt church of Saint Paul outside Rome and belonging to the old church built originally between 386 and 410 A.D., burnt in 1823. The result is, that one great Ionic capital belongs to the arch of triumph built in 386-390 and set on granite columns with bases from the period of Septimius Severus. The inner arcades were built after 390 with alternating old Corinthian and new composite capitals on channelled shafts and old bases with different sizes and profiles. The outer arcades had new Corinthian and new composite capitals with full leaves on smooth shafts and new bases. Thus the inner arcades were richer in their decoration than the side arcades. The workshop of the contemporary architecture is indicated by a monogram which recurs also in other buildings at Rome. The profiles are careless and degenerate, as are also the capitals which imitate types of the earlier imperial period.

Church of Santa Sophia at Thessalonika. - The investigation of the interior and exterior of the church of Sta. Sophia at Thessalonika was continued in 1938 and Marinos Kallighas reports briefly on his work in TIPAKT. 1938, pp. 67-75. Beyond the side walls of the eighth-century church were uncovered the remains of two foundation walls, parallel to each other and with the same structural quality. They must belong to the same building, which was wider than the existing church and had a wooden roof of light proportions. Small fragments of wall paintings were also found and a few coins of the time of Arcadius. The details of the construction and the smaller finds will place this large new structure discovered below the foundations of the church at the beginning of the fourth century A.D. and the period of Constantine the Great. The foundations of a small apsidal chapel were also found at the northeastern corner of the present church. On its walls have survived fragments of paintings, similar in style to the mosaics of the church of the Holy Apostles and consequently belonging to the 14th century. To the same century perhaps must be attributed the building of the chapel itself. The foundations of the church of Sta. Sophia were examined and found to go down to a depth of 6.30 m. Their width varies in accordance with the weight which they had to support, the width of the foundations of the outer wall amounting to 6.60 m. The further investigation of the narthex proved that the dome over its south wing is later than that over its north wing and that at its northwestern corner there was once a stairway leading to the "gynaikonites." The western façade of the church was investigated, and it is suggested that two low tower-like projections existed in its two corners. The suggested restoration is illustrated in fig. 5, while the plan of the existing church, of the earlier structure below it, and of the later apsidal chapel is given in a large plate (opp. p. 68).

Nikopolis. - G. A. Soteriou reports briefly the results of his excavations of the great Basilica at Nikopolis in Πρακτ. 1938, pp. 112-117. In 1938 the narthex, aethrium and part of a stoa which surrounded the entire area of the great basilica were uncovered. The narthex extends beyond and on either side of the side walls of the church proper and communicates with the basilica by means of five doorways, of which the central one is the largest. The floor of the narthex is paved with a mosaic comprising floral, geometric, and cross patterns. The aethrium is of unusual shape. On the north and south sides of the open court there are two deep porticoes which at their east end open into the narthex. Their openings form the only doors through which the narthex and the basilica could be entered. The east side of the aethrium is closed by a wall, in front of which there is a cistern, taking the place of the "phiale," 12 m. in length and 1.50 m. in width. Between the ends of the cistern and the side colonnades of the aethrium were placed two tubs, 2.80 m. in length and 1.10 m. in width, and in front of the cistern were found marble basins, 1 m. in diameter, which evidently were used by the worshippers for their ablutions. This arrangement of the parts of the aethrium is unique, at least for Greece. The floor of the open court of the aethrium is covered with marble slabs; those of the side porticoes with mosaic. The west side of the aethrium was closed by a row of seven columns. These columns and the west facade of the aethrium were tied by means of arches with the stoa which surrounds the basilica. Thus in front of the aethrium is formed a wide passage. These important new discoveries strengthen the belief that in the basilica of Nikopolis, which has a total length of 80 m., we have the metropolitan church of the old capital of Epirus and an important example of Byzantine religious architecture. An excellent plan is added to the concise report in a separate plate (facing page 116).

Nea Anchialos. — G. A. SOTERIOU reports briefly the results of his excavations at Nea Anchialos in 1938 in Πρακτ. 1938, pp. 49-52. Six meters to the east of the apse of Basilica A was uncovered a "peribolos," which surrounded the basilica on all sides and which is preserved to a length of 33.50 m. Two gates of the peribolos were found and they correspond to the two small doors which flank the apse. The propylon of the basilica was entirely cleared and it was found to communicate with the thermae, discovered before, by means of a narrow passage. So Basilica A and its surroundings have been cleared completely and its plan, illustrated in a good plate, was found to correspond closely to the descriptions of such buildings preserved in the writings of the Early Christian writers (especially Eusebius, Eccl. Hist. x, iv, 37). The Basilica is the best known illustration of such descriptions. Among the architectural fragments discovered are members of the "ambon" which can now be reconstructed with great accuracy. The movable finds are kept in the local Byzantine Museum.

Spetsae.-In 1938 on the island of Spetsae G. A. Soteriou completed the excavation of the basilica near the "mill of Brouste" and cleared its narthex. To the west of the narthex there is a court, paved with slabs, instead of the usual aethrium. The smaller finds discovered, including coins of Justinian, prove that the basilica belongs to the second half of the fifth century A.D. and is an example of the provincial type employed in Greece in early Christian times. No traces of settlements dating from the ninth to the fifteenth century were found on Spetsae, and this suggests that the island was not inhabited during those centuries. On a rocky plateau in the northwestern end of the island, and at a place known today as Kasteli, remains of a settlement of the sixteenth century were found. The settlement was destroyed by the Turks in 1769. Some graves belonging to late Roman or Early Christian times were also investigated within the region of the modern сіту (Практ. 1938, рр. 124-129).

Ravennate Origin of Blind Arcade, Etc.—In Felix Ravenna, xlvii—xlviii, 1938, pp. 5-21, Carlo Calzecchi concludes, from a study of early buildings at Ravenna, that the so-called "Lombard" blind arcade and corbel table in fact originated in that city. From Ravenna these architectural features, destined to play such important rôles in the Lombard Romanesque and later styles, spread slowly through the regions subject to Ravennate political and religious control. Calzecchi traces the origin of the motifs in question from the Tomb of Galla Placidia

through that of Theodoric, the "vivaio" or loggia of the Archepiscopal Palace and the clerestory of S. Vitale to the façade of the Reggia ad Calchi or "Palace of Theodoric." Outside Emilia and Romagna the earliest examples, he believes, do not antedate the eighth century. In further support of his theory he appends a list of monuments, including those mentioned above, which date from the fifth to the thirteenth century. They are grouped according to the manner in which the blind arcade is used: (1) in a series of single arches as at Galla Placidia, (2) double arches, and (3) groups of three or more arches. Another list shows the influence of these motifs in Italian Renaissance architecture.

Treasures of Byzantine Constantinople.—A brief article, "Il Fasto Bizantino," by Carlo Cecchelli in Felix Ravenna, xlvii—xlviii, 1938, pp. 22–38, is of value to Byzantine scholars because of its elaborate documentation. In voluminous footnotes the bibliography of what may be called the "luxury arts" of Byzantium is brought up to date and a great number of references to allied topics assembled.

Portrait of St. Vladimir.—In Vladimirsky Sbornik (Belgrade, 1938), pp. 89–112, BARON M. A. TAUBE discusses the figure that is associated with Saint Vladimir on his coins and other monuments. He decides that we have here a form of the trident of Scandinavian and probably pagan origin which was later adopted as a family device by St. Vladimir and his successors as Grand Princes of Kiev and that this sign became a signal for Russia and Russian unity in the early centuries. After the Christianizing of the land, it was often surmounted by a cross. The same device with some modifications was adopted by other than the direct line and it is frequently found now also as a Lithuanian symbol.

Bronze Vase in Bonn.—K. Erdmann associates a bronze vase in Bonn of the sixth and seventh centuries with Sassanian metal and woven work through the lozenge-shaped and medallion designs (Bonn. Jahrb. 143–144, 1939, pp. 255–260). This association supports the thesis, already well known, of the wide spread of Sassanian decorative motives in the Byzantine period.

Early Russian Christian Architecture.—In the Short Communications, Acad. of Science, U.S.S.R. iii, pp. 14–21, M. K. KARGER discusses the architecture of Vladimir Volynsky and Halich in the twelfth and thirteenth centuries. He regards the architecture as influenced by the monastic de-

velopments of the time, in contrast to the cathedral building of the earlier Kiev, and he believes also that the churches of Halich are the earlier group. He therefore places this architecture earlier than the Vladimir-Suzdal type and considers it the work of native artists and not foreign masters sent by Friedrich Barbarossa.

In ibid. iii, pp. 22–27, N. N. VORONIN considers again the architecture of the Halich-Volynian type and the Vladimir-Suzdal type in the twelfth and thirteenth centuries. He believes that the churches are a direct outgrowth of the old Kievan school. He believes, unlike Karger, that the Vladimir structures are the older and that the architects went from there to Halich, so that the buildings of Vladimir are older than those of Halich. It is, however, still too early to decide definitely which theory of descent is the more correct, as the work of excavation has hardly begun. However, the churches of the two groups are too similar to have developed in parallel fashion during these centuries.

In ibid. ii, pp. 29-30, N. N. VORONIN discusses the cathedral and palace of Prince Andrey Bogolyubsky. The palace had been destroyed but it was north of the cathedral and approached by a stone arcade. All the structures were of white stone, and the foundations of the cathedral, and the arcades, as well as the white stone pavement of the square in front and the drains show that the whole structure was of the same material. There was much gilded copper used and apparently much of the floor of the cathedral was covered with copper. There were many frescoes, some ruins of which have been found. The whole group of buildings surrounded by a wall bears evidence to the great artistic and cultural level of the period of Vladimir and his successors and shows that it was the Tatar yoke that weighed heavily upon Russia, for there was no reason to consider the country behind Western Europe before the Tatar attack.

MEDIAEVAL

Sutton Hoo Ship Burial.—The March 1940 number of Antiquity (xvi, pp. 6–87) is entirely devoted to preliminary reports on the extremely important discoveries connected with this early seventh-century ship burial. C. W. Philips discusses the excavations in general, T. D. Kenfrick and Ernest Kitzinger the gold ornaments and the silver plate, O. G. S. Crawford the forty gold coins, while H. Munro Chadwick discusses the possibility of identifying the owner with Red-

wald, King of the East Anglians, who died in A.D. 624 or 625. Twenty-four plates accompany the articles. Read together with BMQ. xiii, 1939, no. 4, these articles form the most complete account of this find that we are likely to have until after the close of the war.

Of particular interest may be mentioned a great gold buckle, two splendid hinged clasps and the frame and mounts of a purse flap. The gold ornaments as a whole reveal "to us the work of one of the greatest craftsmen in the whole Teutonic world." The silver, while not as excellent as the gold, contains a noteworthy hanging bowl distinguished for the mosaic glass in its mounts and by its scroll patterns, and a large plate with control stamps of Anastasius I. Though not distinguished for its style this is noteworthy because it is the second piece of silver plate with a Byzantine stamp to be found in the west. While the gold ornaments seem to be local work, all the silver suggests a foreign origin. Considered as a whole, the group may be called the most splendid collection of Anglo-Saxon jewelry yet found.

Early Carolingian Tombstones.—Six tombstones in the Landesmuseum at Bonn are discussed by F. Rademacher (Bonn. Jahrb. 143–144, 1939, pp. 265–282). He believes that though the workshops were at Andesnach and Gondorf, the stones belong in style to a single group. The griffin motive on the stones he traces through Burgundian ornaments to the influence of Coptic-Byzantine art, though he publishes a local tombstone with a similar griffin design from the first half of the first century. The tombstones date probably at the turn of the eighth century.

Carolingian Vases.—The globular vases, which used to be considered as proof of the conquest of lower Saxony by Saxons, date from the ninth, not from the sixth or the seventh centuries A.D. Since the expansion of Saxons took place before the ninth century the globular vase cannot be used to determine their course (O. Henze, Germania, xxii, 1938, pp. 118–120).

Treasures of Louis the Great.—In Hungarian Quarterly vi, pp. 120–130, Dezső Dercsényi lists the known treasures of King Louis the Great of Hungary and endeavors to identify their present whereabouts. Among these are the donations of the King to the Church of St. Nicholas in Bari and to the Treasury of Aachen, the sarcophagus of St. Simeon at Zara and two codices, the Viennese illuminated Chronicle and a Secretum Secretorum of Aristotle, now in the Bodleian Library. The

descriptions that we have of many objects make it appear that it may yet be possible to identify them in their present locations and thus allow us to secure a more detailed knowledge of the art of Hungary in the fourteenth century.

A "Trundholm Horse."—The chance find of an animal head, a solid piece of bronze, is compared by B. Nerman with the horse of the well known votive ensemble from Trundholm. The solid head reveals simpler technique, and has no engraved decoration. The author sees analogies in the treatment of the eyes, in function, and in the final disposition of the specimens as offerings—the Trundholm find in a peat moor, the other perhaps in water (Fornvännen 34, 1939, p. 166 f.).

German Tombs.—The tomb of a warrior found near Böckingen, Würtemberg, dates about 300 A.D. and is the earliest Alamannic tomb in the agri Decumates after the fall of the Limes (JOACHIM WERNER, Germania xxii, 1938, pp. 114-117).

U.S.S.R.

A Crimean Skeleton.—In Short Communications ii, pp. 6–8, G. A. BONCH-OSMOLOVSKY discusses 18 bones of the hand and foot of a skeleton found in the grotto of Kiik-Koba in the Crimea. The form of the hand of this skeleton, which is of old Palaeolithic times and dates from before or in the early ice age, allows us to see that it was a crude instrument, more or less wedgeshaped, but ill adapted for moving the fingers. The hand is more primitive than that of the Neanderthal type and the author concludes that this shows that the development of the human species has been very largely determined by the nature of the work which it had to do, as was argued by Engels.

"Mammoth Grotto." – In Short Communications ii, pp. 33–36, B. F. Zemlyakov discusses the report on the "Mammoth Grotto" at Melitopol'shchin near the Sea of Azov. The author shows that the figure, which was considered a mammoth, is really a bull with the head in a different position and he rejects the idea that we have an extremely ancient work from the Solutrean or Aurignacian periods, when the mammoth was still existent. He considers it rather a work of the Upper Palaeolithic period, to which the other figures in the composition would normally be assigned.

The Middle Don.—In Short Communications ii, pp. 17–19, G. B. Podgrayetsky studies the sites on the middle Don. The possibilities for

metal work were present at an early date, since there were important mines here, both of copper and iron. At this period the area was closely connected both with the steppes of the south and the forests of the north and hence a study of these sites will furnish much information as to the synchronizing of various other cultures in the general area.

Prehistoric Mining. - In Short Communications ii, pp. 22-23, S. S. CHERNIKOV discusses prehistoric mining as found in the Kalbinsk and Narym mines on the upper Irtysh. The methods used were those of an open cut, oblique shafts leading to a depth of 15 m., galleries running at least to a length of 70 m., and an open series of pits on steep hillsides. Mining of copper and lead was largely done with the aid of fire. Primitive methods of securing safety were in effect. Thus columns of stone or wood were erected in the galleries, etc. The average working groups consisted of some 10-12 people, including women and children. The works seem typical for the Karasuk and early Nomadic periods and during this time there were probably prepared in this area yearly 3-5 tons of bronze.

Palaeolithic Site in Ukraine.—In Short Communications ii, pp. 10–12, P. I. Boriskovsky discusses the palaeolithic site Pushkari I, situated on the river Desna near Novgorod Seversky in the district of Chernigov. There were many large flints and in this the site is remarkable for the Ukraine. The type seems to be similar to Aurignacian or Solutrean and the author considers it older than Magdalenian. A remarkable feature was the large number of mammoth bones. These were found unburned on a hearth in the house and the author conjectures that they were stored near the collective dwelling, perhaps on the roof, and fell on the hearth after the dwelling was abandoned.

Cultures in Ukraine.—In Short Communications iii, pp. 3-13, E. Yu Krichevsky discusses the various cultures in the Western Ukraine in the Neolithic and Early Bronze periods. He tries to show that the ribbon pottery, the Tripolye style, and the braided pottery are not the work of various migrating groups, but are determined largely by the introduction of agriculture and the beginning of settled life among the fishers, and also by cattle raising. He lays great stress on the excavations at Bil'che-Zlote in an endeavor to show that we are dealing with a process of development rather than of migration and devotes con-

siderable time to attacking Polish archaeologists who follow the migration theories.

Arctic Palaeolithic.—In Short Communications ii, pp. 12–13, B. F. Zemlyakov studies the finds of 13 sites in western Murman and 9 in north and central Karelia, belonging to the Arctic Palaeolithic. He decides, from the nature of the finds, which consist of large and coarse quartzite remains and also flints, quartz, etc., that we are dealing with a period which is contemporary with the Baltic mesolithic, but which retains many palaeolithic traits. His dating conflicts with the dates proposed by Nordhagen and Kleve-Eiler.

Palaeolithic Sites.—In Short Communications iii, pp. 35–39, S. N. Bibikov reports the study of palaeolithic sites in the southern Urals along the river Yuryuzani with the main sites in the Klyuchevaya and Buranovskaya caves. These are probably of the Solutrean period. In the second cave there was found also the neolithic burial of a woman with some ochre around the skull and drawings on the walls of wild animals, also done in ochre. Apparently the caves were too damp to be permanent dwellings and the quality of the remains seems to agree also that they were temporary abodes of bands of hunters.

Tripolye Culture. - In Short Communications ii, pp. 38-41, T. S. Passek reviews briefly the papers read at the Congress on Tripolye culture in Kiev, January 7-9, 1939. These papers were concerned with the rise and disappearance of Tripolye culture, its relations to the early huts found in Kiev and such sites as Usatovo (which is probably in the last stage of Tripolye culture). Emphasis is laid on the fact that every Tripolye house was a collective one, although there were many separate couples and families living in each house. We find definite connections with the earlier civilizations, although at Tripolye the care of animals and agriculture was the main occupation. Later at Usatovo the terrain was probably more suitable for animals than it was for agriculture.

Neolithic Sites.—In Short Communications ii, pp. 13-14, O. N. Bader discusses the neolithic sites in the region of the Petrovsky Lakes and the upper Volga. He finds that those on the Lakes have the character of permanent settlements and those along the Volga are rather temporary sites for hunters and fishers. Some of the remains have a makrolithic character. These sites, with the lack of animal bones, are sharply different from the Fatyanovo graves which are rich in these bones and which probably represent the

burying places of other tribes with other modes of life.

Burial Mounds in Western U.S.S.R.—In Short Communications ii, pp. 3–5, P. N. Tretyakov discusses the various burial mounds in the western part of the U.S.S.R. To the north are the volcano kurgans (conical with a series of burials). South of them are the long kurgans. In the upper Oka valley are kurgans with wooden framework. South of these again are the beginnings of the Ukrainian fields of urn burials. The author concludes that the northern and southern groups of Eastern Slavs were distinct in culture until the end of the first millennium A.D., when they were fused together under pressure. The first group is perhaps Lithuanian and Baltic rather than Slavonic.

Discoveries along Kama River.-In Short Communications ii, pp. 19-21, N. A. Prokoshev outlines some of the recent discoveries along the Kama River in the district of Perm. The work of the Kama expedition has brought to light at Astrakhantsevo a group of buildings of the second millennium B.C. These consisted of six separate structures connected by corridors. In some of the buildings were pits intended for columns and others intended for storehouses. There was apparently a community house here in which benches were placed along the walls for sleeping. A rich inventory of material was discovered but these are discussed only in general terms. The pottery was largely egg-shaped, covered with a comb ornamentation.

Kuban Kurgans.-In Short Communications ii, pp. 14-17, B. E. DEGEN-KOVALEVSKY endeavors to date the large Kuban kurgans, of which the kurgan of Maykop is a good example. He points out the difference between these and the North Caucasian Eneolithic kurgans, in view of the greater development of many features, such as the differentiation in the graves of women and slaves as distinct from men, the use of metals, etc., and in many of these points the kurgans are nearer to the Scythian remains. They all show influences of or similarities to various other cultures, such as Troy VI, Mycenae, northern Iran, etc. The author therefore dates them around the beginning of the first millennium B.C. with the possibility that different kurgans of the group may be separated by considerable periods of time.

Urartu and Transcaucasia. — In Short Communications iii, pp. 28-34, B. B. Piotrovsky discusses the relations of Urartu and Transcaucasia. He points out that the name Khaldic cannot be used

of the Urartu, who from their inscriptions were chiefly seeking by conquest slaves and cattle and not metal objects. He shows also that the Urartu formed only a small part of the Vannic Kingdom and could not be regarded as ancestors of the Armenians who occupied some of the same territory after the sixth century B.C.

Dyakovo Gorodishche.—In Short Communications ii, pp. 26–27, G. P. Grozdilov discusses the oldest gorodishche of the Dyakovo type which are common near Leningrad. These have a definite relation to the earlier settlements of the Neolithic period, with their dependence upon hunting and fishing. The earliest mounds give us little, but the author does not believe that there was a tribal unity around the beginning of our era. However, the population showed many similar qualities and usages which extend from the earliest period to feudal times.

Upper Volga.—In Short Communications ii, pp. 24–26, P. N. Tretyakov discusses briefly the finds of the upper Volga area, especially at the site of Gorodishche where material of all periods was found. Culture in the Upper Volga area is divided into four periods, from the middle of the first millennium B.c. to our era; (2) from the third century B.c. to our era; (3) from the beginning of our era to the third century A.D.; (4) from the third to the sixth century A.D. The care of animals and fishing played a larger rôle in the life of the people than did agriculture. In the oldest period there are many parallels to the Aninyinskian culture of the Kama and certain Baltic cultures.

Siberia.—In Short Communications ii, pp. 23–24, G. P. Sosnovsky discusses the grave monument and the graves at Ilmovaya Pad' in Siberia. In these were discovered many objects of Chinese origin, especially silks. These are very similar in pattern to the remains found at Noin-ula and probably date from the same period, the first half of the first century A.D. and the Han dynasty. The silk was used to line both the inside and outside of wooden coffins. These remains represent the period of greatest Sinaization of the Hunnise tribes and show the wide distribution of Chinese work among the northern nomads at the beginning of our era.

Yenissey Kurgans.—In Short Communications iii, 39-42, L. A. YEVTYUKHOVA and S. V. KISELEV discuss the excavation of some kurgans in the valley of the Yenissey River. Among the most important finds was a silver plate with four gold pitchers, two plain and two embossed, and in an-

other kurgan a plaque of a rider turning in his saddle and shooting with the bow. These and other finds which approximate the Scytho-Siberian style show us some details of the life and wealth of the Kirghiz aristocracy in the 8th and 9th centuries.

Yaroslav Burials. - In Short Communications ii, pp. 27-28, Ya. V. Stankevich discusses the burial place at Mikhailovskoye in the district of Yaroslav along the Volga. Sixteen kurgans have been excavated. Twelve contained evidence of cremation and in five of these were discovered representations of bear's paws in clay and clay rings containing magical objects connected with the cult of the bear. The inventory was usually poor and monotonous. These date from the ninth and tenth centuries A.D. In four other kurgans, a little later, there was burial with the head to the northwest. In these were more marks of Scandinavian influence and in one Kufic money of Nasr-Ibn-Achmed (913-943) was found. The author believes that these were originally Slavonic kurgans and that their influence spread later down the Volga near Kostroma, although the population being on the river were more easily subjected to Scandinavian and Eastern influences.

Crimean Fortress. - In Short Communications ii. pp. 30-32, S. N. Bibikov discusses the isar near the village of Chorgun' in the Crimea. This is a very well preserved fortress of the type known as isar, for most of these structures on mountain heights are so badly preserved that they cannot be studied satisfactorily. It was apparently built in the fourteenth or fifteenth century under the Mangup principality and was intended to guard the route of the River Chernaya from the direction of Inkerman. The square of the isar has an area of about 2000 sq. m. and we can trace out the foundations of the structures within the fortification. One of the walls is preserved in places to a height of 3.25 m. and its thickness is from 1.80-2.20 cm. The defensive wall of huge blocks is also preserved. The pottery has some similarities to that of the latest layer in Chersonesus and also to that of Eskikermena and Mangupkale.

Kirov.—In Short Communications ii, pp. 21–22, N. A. Prokoshev lists and surveys briefly the early sites (gorodishche) near the city of Kirov on the river Vyatka. The sites are quite small and much of the material has been ascribed to the fifteenth and sixteenth centuries of our era. The author believes that the remains in the Museum of Kirov show that they date from the Ananyinskian period and the early Pyanoborya period.

EXCAVATIONS ON THE SLOPES OF THE ACROPOLIS, 1939

The excavation on the slopes of the Acropolis was carried on in three separate areas, which will be referred to as the East Area, the Central Area, and the West Area.

The East Area is situated some fifty meters to the east of the Theatre of Dionysos. In a trial pit dug at this point at the end of the preceding campaign traces of a roadway were discovered which seemed to justify a more extensive exploration of this section of the slope. The area cleared in 1939 (fig. 1) measures ca. 23 m. from east to west and 34 m. from north to south. Mediaeval and modern occupation of the site has brought about the destruction of whatever monuments may have stood here in Greek and Roman times. A late Christian cemetery occupied the northern half of the excavated area. Here numerous graves, sunk below the classical level, have caused all traces of earlier occupation to disappear.

In the south half of the excavated area were found the ruins of a large building (visible in the lower left corner of figure 1), constructed in early Christian times, chiefly of re-used material. It shows at least two periods of construction. Its floor level was more than one meter below the level of Roman times. Numerous later pits, made for storage and for other purposes, complete the destruction.

To the north of the late building was discovered part of a paved roadway, extending in an east-to-west direction, and constructed along the line of the earlier road marked by the two retaining walls which extend toward the east from the wall surrounding the auditorium of the Theatre. These two parallel walls, ca. 7 m. apart, are of Greek construction. They are built of conglomerate stone like that used for the foundations of the Theatre, and are bonded into the analemma of the cavea, which was probably built at the time of Lycurgus.

The roadway laid bare in our excavations is the eastward extension of the road through the cavea.

¹ The excavators in the field were: Carl Roebuck in the East Area; John Craft in the Central Area; and Dorothy Schierer in the West Area. The catalogues of finds were made by Benita Holland. The architect was Wolf Schäfer, and the photographer, Hermann Wagner. Andreas Mavraganes was potmender and restorer of antiquities.

² See Dörpfeld, *Das griechische Theater*, p. 41 and pl. I; Judeich, *Topographie von Athen*, pp. 181, 311, and plan II.

But the pavement (fig. 2) is of Roman date. It is made of thin marble slabs laid in lime mortar over a firm rubble bedding. In most of the preserved sections of the road this bedding is very thin. Along the north edge of the road is a low wall which was lined on the side toward the road with marble veneer like that used for the pavement. The corresponding wall on the south side has disappeared. At the widest point the preserved width of the pavement measures more than six meters.

The road inclines toward the west, and at intervals the slope is made less steep by the insertion of one or two steps. At one such point, where parts of two steps are preserved (fig. 2), the front edge of the blocks has been undercut so as to form an acute angle with the tread of the step. Another piece of a step found in situ at the west edge of the excavated area (seen in figure 1, left center) has no such undercutting.

It is obvious from the presence of the steps that the road was not intended for wheel traffic. In fact the marble slabs used for the pavement are so thin that it can only have been meant for use by pedestrians. From the great width of the road and the nature of its construction we are justified in assuming that the road is part of a processional way connected with the Precinct of Dionysos and the other sanctuaries on the south side. It must have branched off from the Street of the Tripods, somewhere in the vicinity of the Monument of Lysikrates.

The exact date of the pavement has not been determined. It may be part of the reconstruction of the precinct from the time of Nero, when the scene building was rebuilt and the whole theater was altered to conform more nearly to Roman tastes. Possibly it is part of a general reconstruction of the approaches to the Acropolis, which have left traces on the northwest slope.³

On the North Slope of the Acropolis two separate areas were excavated. The West Area is a narrow strip west of the section cleared in 1938, extending from the Acropolis rock to the modern road below the Church of the Savior. A few fragments of inscriptions and some insignificant pieces of pottery and figurines came to light in this area. A small pit dug in the native soil and

³ Shear, *Hesperia* vii, 1938, pp. 333 ff.; viii, 1939, p. 207.



Fig. 1.—East Area, Looking North, Showing Ascending Road in the Center



Fig. 2.—Pavement of Road and Marble Steps in East Area



Fig. 3.—Terracotta Figurine of Aphrodite



Fig. 4.—Central Area Showing Votive Cups Laid out in Rows

filled with stones yielded one complete Mycenaean vase. It is not unlikely that the pit is all that remains from the cellar of a Mycenaean house. This is one of the many indications that the ancient ground level on the slope was in most places higher than the level of later times. In this way we may explain the strange phenomenon of a large number of wells existing here where no other remains of habitation of Greek times have come to light.

The Central Area is situated directly to the north of the Sanctuary of Eros and Aphrodite. In view of the steepness of the slope at this point it would not be surprising if objects from the sanctuary should have found their way to the area excavated this year. Figurines were fairly numerous, but few are of such a nature that the figures can be identified. The most interesting is the upper part of a figure of Aphrodite (fig. 3). She holds an apple in the right hand and a dove in the left, and on either shoulder stands a small winged Eros.4 Perhaps we should recognize in one of the winged figures one of the other personifications, Anteros, Himeros or Pothos, whose cults merge with that of the goddess. Among the other objects from the sanctuaries are some oblong pebbles of the kind dedicated as phallic symbols on the small altars that line the Peripatos on the south side.5

Some thirty meters north of the Peripatos we discovered a level area, approximately ten meters in length and four meters in width (fig. 4). Originally this area extended farther toward the north, where walls of Turkish cellars and foundations of other late structures cut into it. Along the south side is a curving scarp, somewhat less than a meter in height, resulting from the cutting away of the hill below to produce the level area. Considerably more than two hundred small skyphoi were found lying on the floor of this area in a layer of soft earth. They are of three principal varieties. The most common type has small pinched-out handles and a comparatively squat body. These are all covered with a rather poor brown or black glaze. The second variety is somewhat taller and more slender. The rim curves in so as to make the opening narrower and the handles are large and shaped like swallow-tails. The vases of this variety are covered with a black glaze, usually of good quality. The third variety is like the second in shape but unglazed. A very few miniature cups and part of a small plate were found among the skyphoi, but their presence may have been caused by accidental intrusion.

The most interesting feature of this area is the arrangement of the vases. Where they were found undisturbed they were lying in straight rows of four to six in each row (figs. 4 and 5). In a few cases there were two parallel rows very close together, each pair probably forming a single group. The arrangement within each row was as uniform as the shape of the vases themselves. In most rows the cups were lying upside down at approximately equal distances from each other and with all the handles turned in the same direction. One group sufficiently well preserved to show the arrangement consisted of four equidistant cups lying on the side with the top toward the west. In no case were cups of two different varieties found in the same group.

There is no appreciable distinction in date among the three varieties, but the vases were not all set out at the same time. There were a few instances of two rows crossing each other with a slight difference in level, which would seem to indicate that the vases were covered over with earth not long after they had been set out. This is further shown by the fact that a very large number came to light quite intact, which would hardly have been the case had they been covered up through gradual accumulation of earth.

At the north edge of the area, cutting into the scarp, is a circular pit resembling an incomplete well, such as have been found elsewhere on the slope. Even the footholes in the side are present. It extended only about a half meter below the level of the area on which the skyphoi were lying. At this level there was a burned layer in the pit, and in it were three skyphoi larger than those of the second group and of better quality. It is difficult to determine how these vases are related to those described above, from which they differ both in size and shape. Possibly the pit was dug into accidentally when the area was levelled off, and in that case the three skyphoi are earlier and have nothing to do with the others. But the possibility must be admitted that the pit was made purposely to serve some function in connection with the level area on which the vases were discovered. The approximate date of the skyphoi is the second half of the fourth century or possibly even somewhat later.

What purpose the level area with its rows of

⁶ See *Hesperia* ii, 1933, pp. 342-347; iv, 1935, pp. 119 ff.

⁴ For the type of figurine compare terracotta altars from Tarentum (*Opuscula Archaeologica* ii, 1938, pl. VII), kindly called to my attention by the author of the article, Miss Elisabeth Jastrow.



FIG. 5.-VOTIVE CUPS AS FOUND

vases was intended to serve remains a mystery. It would seem natural to regard the whole complex as a potter's establishment, where vases were set out to cool after being removed from the furnace; or as a shop in which vases were exhibited for sale to be used by the worshippers in the nearby sanctuaries. But the careful grouping of the skyphoi within each row and the haphazard arrangement of the rows among themselves militate against such an explanation. If the vases had been arranged for display they would more naturally have been stacked in vertical rows one inside the other, nor would there seem to be much reason for an elaborate display of vases of such simple and uniform shape and appearance. Furthermore, on this theory, we should have to suppose that the whole establishment was suddenly abandoned and quickly covered up before there was time to rescue the pottery. That this was not the case is shown by the rows crossing each other at different levels.

There can be little doubt that the arrangement of the vases has some religious significance. The separate groups may have been regarded as individual units on the order of multiple cult vessels, like the kernoi. Such vessels were probably used in many different cults. Because of the proximity of the Eros-Aphrodite sanctuary it is likely, though by no means certain, that the vessels were used in the cults of those two deities. Until the rest of the slope has been excavated this remains one of the many unexplained phenomena of this whole region which seems to have been entirely devoted to strange and primitive religious practices.⁶

Among the objects from the late occupation of the area, not many deserve notice. In one of the numerous pits used for cesspools were found some 1500 small Turkish bronze coins which have not yet been studied. With the coins were a few knucklebones which may have been used as dice, indicating the probable source of the accumulated treasure.

OSCAR BRONEER

PRINCETON, NEW JERSEY

⁶ A passage in Athenaios (xi, 496), kindly called to my attention by Miss Frances Jones, refers to a peculiar use of two vessels, plemochoai, in the Eleusinian Mysteries: δύο πλημοχόας πληρώσαντες τὴν μὲν πρὸς ἀνατολάς, τὴν δὲ πρὸς δύσιν ἀνιστάμενοι ἀνατρέπουσιν, ἐπιλέγοντες ῥῆσιν μυστικήν. This passage, though obviously referring to a different religious rite, is suggestive of the kind of function that the vases from our excavation may have served.

BOOK REVIEWS

RINGKAMPF IM ALTEN ÄGYPTEN, by Helmut Wilsdorf. Körperliche Erziehung und Sport, Beiträge zur Sportwissenschaft, Schriften des Institutes für Leibesübungen der Universität Leipzig, Heft 3. Würzburg-Aumühle: Konrad Triltsch Verlag, 1939, RM, 2,40.

Current German interest in physical development has led to the publication of a series of historical studies on "Körperliche Erziehung und Sport," of which Wilsdorf's on wrestling in Egypt is the third. The author has assembled in photographs and drawings small reproductions of all his sources. These are mostly reliefs and paintings. They date from the fifth to the twentieth dynasty; most prolific are the twelfth-dynasty tombs of Beni Hasan. Wrestling scenes in the tombs were doubtless meant, like other elements of their decoration, to contribute to the pleasure of the deceased by making possible his continued or repeated presence at the events depicted. The author suggests that they may also have been thought useful for instructing him how to overcome possible dangers in the hereafter. In the scenes occur a few concessions to perspective which facilitate a little the interpretation of Egyptian conventions. The author finds most of the holds recognizable; he believes that the few exceptions may include some holds unknown today and some mistakes by the artists. Belts are usually worn, and some holds are by the belt. Legends, relatively rare, seem to record mutual taunts or cries of triumph, though the appearance at Medinet Habu of a referee uttering a warning suggests that definite rules were observed. A Middle Kingdom relief at el-Bersheh shows what the author calls another "referee": but, since above him are two legends, suitable only for wrestlers and facing in opposite directions, it is likely that the damaged scene should include an opponent.

The author's treatment of the legends as a whole is both poorly typed and unconvincing. For example, he makes little out of his "Text-gruppe III," unit 3, which may well be translated: "Boast not! Behold, it is our great lord who is watching thee." In fact, his whole book is disappointing in comparison with the scholarly treatment of the Empire evidence by J. A. Wilson in Journal of Egyptian Archaeology xvii, 1931,

pp. 211-20 and plates xxxvii ff., whose translations Wilsdorf modifies to the disadvantage of the facts. Only two bouts not dealt with by Wilson are included in the author's Empire material: one on Berlin ostracon No. 23676, the other on a standard pictured in Theban tomb No. 74. Source presentations ignored include that of Medinet Habu in the Oriental Institute's Publications ix, 1932, plates 111 ff., with the translations and comments thereon by Wilson in its "Studies in Ancient Oriental Civilization," No. 12, 1936, pp. 137-40, also that of Theban tomb No. 19, after Hay (sketched between 1826 and 1838), as well as in its present state, by G. Foucart in the Mémoires de l'Institut français d'archéologie orientale du Caire lvii, fasc. 3, Le Caire, 1935, plates XIII and XV. The author objects to the breakup of original sequences in Rosellini's plates of Beni Hasan wrestlers; but his own Plate C shows the same tendency, for on the wall his No. 26, not No. 11, follows No. 10. He objects also to Newberry's count of 220 pairs instead of 219 in the largest assemblage of Beni Hasan wrestlers; but Newberry is right, for on Plate A Wilsdorf has used the number 73 twice! Such misunderstandings and oversights as those cited tend to leave the reader in doubt on other points also.

T. GEORGE ALLEN

University of Chicago

The Fauna of Ancient Mesopotamia as Represented in Art (Analecta Orientalia 18), by E. Douglas van Buren. Pp. xi+113, pls. XXIII with 108 figs. Rome, Institutum Biblicum, 1939.

This new work of Mrs. E. Douglas van Buren is a noble example of her tireless activity, of her enthusiasm for the cause of archaeology, of her extensive research in a field daily growing in new volumes, pamphlets and reports, all classified and interpreted in her clear, sober manner, in order to produce an excellent volume of reference to future scholars. The work is hers, even if she modestly blames the initial inspiration of it on Dr. Alfred Pohl, S.J.—editor of Analecta Orientalia—and disclaims being a trained zoologist, while she undertakes such a catalogue—48 in number—of strictly natural animals, represented in Mesopotamian Art.

She follows in the main lines the great work of Brehm and of Houghton, Friedrichs and Hilzheimer and other writers of separate studies on the fauna of ancient Mesopotamia; also the comprehensive study of animals by Landsberger and the survey of the Fauna of Iraq, made by the members of the Mesopotamian Expeditionary Force D, 1915–1919, but she combines them all in a handy volume, which will be welcome to English readers.

Her references to the original monuments are innumerable and exhaustive. And her remarks on debatable cases sum up and localize problems of types and dates. Most interesting are the following articles on: Lion, Dog, Fox, Weasel and Marten, Bear, Ape, Jerboa, Hare—about 2000 B.C.—Horse and Equus onager, Camel with one or two humps—early example—Bos, Buffalo, Humped Bull and Bison, Elephant—still found on the Euphrates about 800 B.C.—Crocodile and Rhinoceros—from the Indus Valley—Pig, Sperm Whale, Ostrich—about 2000 B.C.—Snakes, Fishes, Fly, Scorpions, etc.

Twenty-three beautiful plates provide illustrations, never found before in one volume.

A noble example indeed, which shows what wealth of material still awaits and will reward further research in Babylonian Archaeology.

L. LEGRAIN

University Museum Philadelphia

DE TOREN VAN BABEL. by Th. A. Busink. Pp. 79, pls. III. Batavia-Centrum, 1938.

Mr. Busink is an architect and for the last ten years has shown a keen interest in the tower of Babel—the famous ziggurat or stage tower of Babylon. He lectured on it, published articles about it, and finally summed up his researches in the present little volume.

The tower does not exist any longer. All the bricks have been quarried out and sold long ago. Even the location was forgotten. Early travellers were shown instead the imposing ruin of the Nebo tower at Borsippa, till finally its very foundations were discovered by Koldewey and enough of the surrounding courts to allow the reconstruction of an exact plan of it, south of the royal palace in the city of Babylon.

Anyhow a good description of it was left by Herodotus, who counted eight stages. And what is still more to the point, a technical survey of it by a Babylonian architect in the year 83 of King Seleucus (Dec. 12, 229 B.C.), written in cuneiform characters on a good clay tablet, was seen by George Smith in private hands probably in Baghdad, copied and published by him in 1876. But here were only seven stages instead of eight. The Smith tablet, as it was called, was finally rediscovered in Paris and text and translation published by Scheil in 1913, along with a reconstruction based on it by Marcel Dieulafoy.

On the strength of the Koldewey excavation, the Herodotus text, the Smith tablet, before and after the Scheil publication, many scholars and architects in France and Germany tried their hand at a reconstruction of the famous tower. Mr. Busink, after reviewing them all and reproducing the plans and elevations of Koldewey, Andrae, Martiny, Unger, Dombart and Moberg, finally proposes his own reconstruction. He does not think much of the efforts of Weissbach, Hommel, Thureau-Dangin, or Dieulafoy, himself an architect and mathematician. The volume of Woolley on the best preserved tower, the ziggurat of Ur, was not yet available.

His final chapter is devoted to the various interpretations of the meaning and use of those huge Babylonian towers. All told, he is qualified as an architect to his opinion how best, from so many conflicting sources of information, to restore à monument which from our childhood has haunted the minds of men.

Between so many reconstructions we may choose. Who said once that, if the Venus of Milo had been in a Berlin Museum, the learned Doctors would have found already three different ways of restoring her arms?

L. LEGRAIN

UNIVERSITY MUSEUM PHILADELPHIA

DIE METALLINDUSTRIE ANATOLIENS IN DER ZEIT von 1500-700 vor Chr., by Stefan Przeworski. (Internat. Archiv für Ethnographie Bd. XXXVI, Supplement). Pp. xii+206, pls. 22, maps 2. Leiden, E. J. Brill, 1939. 16 guilders.

The ancients ascribed to the peoples of Asia Minor great knowledge in metallurgy and extraordinary skill in the working of metals. Is this opinion of theirs justified by the facts, or does it merely reflect the circumstance that Greece learned much in this field from her eastern neighbors?

The tradition can be checked on the basis of the finds which archaeology provides in increasing numbers. In 1933 I was obliged to state (Kleinasien, p. iii) that as good as nothing of the production of the Hittite metal workers has come down to us, although the Hittite texts mention many details. What else could I have done at a time when the results of modern excavations were not yet known? If the situation is different now, we owe this to the lively activity of archaeologists who, since then, have investigated Anatolia with marked success. Alishar, Boğazköy and Alaca are the most significant sites. The results obtained there allow the evaluation of isolated pieces scattered over many museums of the world which heretofore have been assignable to no certain period.

Even so the situation remains difficult enough. What archaeologists call the "Hittite Age" now-adays still extends from the last centuries of the 3rd millennium to 1200 B.C. and little development is recognizable within these thousand years. With our present means, it is still hard to say which portion of the surviving material belongs to the older part, and which to the later part (the great Hittite empire) of this long period. When Przeworski dates most of the available material to the period after 1500, it is to some extent arbitrary; it leaves something of a vacuum for the earlier part of the period.

The author deals with his subject in four chapters. The first two (pp. 29–88 and 89–137) discuss the Bronze Age; they present the material first from the typological and afterward from the technical point of view. The fact that Asia Minor is not isolated, but part of the Near East is rightly stressed; the incessant influences of Mesopotamia and Iran are duly emphasized and the continuity of the tradition clearly shown. Chapter III (pp. 138–165) turns to the Iron Age. No predominance of Asia Minor in working iron can be proved by our material; Anatolia merely shares in the progress which is being made elsewhere.

Chapter IV (pp. 166–188) gives a historical synthesis. The author distinguishes three flourishing periods: (1) around 2400 B.C., (2) 1500–1200 B.C. (Hittite empire), (3) 800–550 (Urartu, Tabal, Lydia, etc.). The first period is best known from the tombs of Alaca with their astonishing finds and from the treasures of Troy IIc. It still falls within the Copper Age, since bronze is only occasionally used; the period already shows proficiency in working gold and silver. Iron occurs as a rarity. Period I is separated from II by a virtual vacuum (partly for the reasons indicated above). The second period leads us into the fully developed

Bronze Age. During the latest part of the period iron gains more and more in importance. The author advances the view that increasing difficulties in obtaining the necessary raw material which had to be imported favored a policy of selfsufficiency and helped to develop methods which made the competition of iron economically possible. This process resulted first in a symbiosis of the two metals, bronze being predominantly used for utensils of daily need, while iron was reserved for more presumptuous purposes. This intermediary period — politically a period of decay is poor in precious metal. The third period is the one in which the Greeks of the East participated. It develops metallurgy to its height in various centers and employs advanced methods.

During all of its long history the Anatolian metal industry must be conceived as part of the corresponding industries in other parts of Hither Asia; there is a continuity typologically as well as technically.

Przeworski's work lays a new foundation for all further work in this field. It is the first attempt at collecting and coordinating material which is invaluable for the historian of civilization.

ALBRECHT GOETZE

YALE UNIVERSITY

UGARITICA. ÉTUDES RELATIVES AUX DÉCOUVERTES DE RAS SHAMRA. Première série. By
Claude F.-A. Schaeffer. (Mission de Ras Shamra
tome III). Pp. viii+331, figs. in text 135, pls.
32. Paris, Librairie Orientaliste Paul Geuthner,
1939. Frs. 200.

The Cuneiform Texts of Ras Shamra-Ugarit. By Claude F.-A. Schaeffer. (The Schweich Lectures of the British Academy, 1936). Pp. xv + 100, pls. 39, figs. in text 15. London, published for the British Academy by Humphrey Milford, Oxford University Press, 1939. \$3.25.

The excavations at Ras Shamra, in 1939; their eleventh season, rank among the most spectacular ever conducted. Ras Shamra, situated on the shore of northern Syria, has provided us with rich evidence for an unexpectedly lively exchange between the various parts of the ancient world, thus affording a deep insight into the complexity of the cultural and ethnic situation of a remote past. Moreover, it has yielded numerous inscriptions in various languages, among them documents in an early Semitic dialect, written in an alphabetic type of cuneiform.

Claude F.-A. Schaeffer, the director of the ex-

cavations, reports in the books to be reviewed here on various aspects of his investigations on the basis of his intimate knowledge of the facts. In *Ugaritica* I the French scholar gives first a survey of the history of Ugarit (this is the ancient name of Ras Shamra), and then deals with a few specific archaeological problems. The high value of the volume is enhanced by excellent plates and numerous figures in the text.

The two main strata of Ras Shamra (numbered I and II), rich in valuable objects, date in the second millennium B.C., which thus presents the most striking results. Three deeper layers (III, IV, V) have been established by sondages. The deepest (V) is palaeolithic, IV contains pottery characteristic of the so-called Halaf period, and III runs parallel to the 'Ubaid and Jamdat Nasr periods of Mesopotamia. Further investigation will doubtless result in the establishment of subdivisions. As it stands, the time covered by the respective strata, particularly by III, is rather extensive.

Ras Shamra II comprises the first half of the second millennium and is roughly contemporaneous with the XIIth dynasty in Egypt and with the Hammurabi period in Mesopotamia. Egyptian influence is evidenced by remnants of sculpture which leave no doubt that the Pharaohs dominated Syria. But the Aegean elements are more significant; they increase steadily, until they become predominant in the seventeenth and fifteenth centuries. After an intermediary period (sixteenth and fifteenth centuries), during which Minoan and Mycenaean finds are lacking—it is the floruit of the Hurrians!—in Ras Shamra I, a civilization develops which might rightly be called Syro-Mycenaean.

The relations between Ras Shamra and the Aegean world are described in Chapter II (pp. 53–106) in a more detailed manner. They date back at least to Middle Minoan II (Kamares period), i.e., to the eighteenth century, gradually assuming considerable proportions. The author feels compelled to assume an extensive Minoan colonization and the presence of Minoan settlers in Ras Shamra. The funerary customs and the vaulted tombs of Ras Shamra I show the Aegean influence in the most obvious way. The almost complete absence of Hittite elements is a negative fact of significance.

The last two chapters of *Ugaritica* I aim at emphasizing the Hurrian element in the civilization of Ras Shamra. Its presence is clear from Hurrian

proper names and Hurrian inscriptions. Schaeffer claims an iron axe and two copper statuettes as works of Hurrian art. The axe (pp. 107-125) has an iron blade fitted in a gold encrusted socket of bronze, which shows the plastic figure of a boar and two lion heads, one at either side of the hole for the shaft. The object is ascribed to the Hurrians, because of the alleged age of iron-production in this nation, its affinities to objects with similar decorations from Hurrian territory, and particularly because of its resemblance to the sword deity of Yazili Kaya near Bogazköy. The first reason is unconvincing, the others are not quite sufficient for such far-reaching conclusions, particularly when the scarcity of the comparative material is taken into consideration. Nevertheless. Schaeffer's thesis may prove to be correct.

The Hurrian character of the two statuettes (pp. 126-143) is more problematic in my opinion. One of them represents a seated woman, the other a standing god. For stratigraphic reasons they must be older than 1900 B.C. This relatively high date is not favorable to the author's thesis; there is no evidence for Hurrians in Syria before 1900. The author rightly compares the well known statuette from Bogazköy (Bittel, Bogazköy, pl. 1, no. 1) with his female statuette. That piece is, however, of still earlier date, probably closer to the Akkad period. Another statuette which should have been mentioned is AO 2769 of the Louvre (from Vil. Maraş), recently published by Przeworski (Metallindustrie Anatoliens, pl. 15, no. 4). The statuette from Mishrife and the head from Jabul, which the author adduces for comparison, have been claimed by Dussaud (Syria 7, pp. 336 ff.) - and it seems to me with more justification - as "Amurrite."

The volume closes with an elaborate bibliography (pp. 145–207) and an *Index général* (pp. 209–322) to the principal contributions dealing with Ras Shamra. The bibliography includes both archaeological and philological books and articles. It lists no less than 512 items, proof enough of the significance which the learned world attributes to Schaeffer's excavations.

The smaller book, published in English, is a more popular account of the main results achieved at Ras Shamra.

Its first chapter (pp. 1–31) is an excerpt from the first part of *Ugaritica* I just reviewed. Its further chapters concentrate on the information which can be obtained from the epigraphic material. Schaeffer is no philologist himself, and therefore had to rely on second-hand information. He makes extensive use of Thureau-Dangin's translations of the Akkadian texts, and follows Virolleaud and Dussaud closely for the Ugaritic texts. The lack of spontaneity which results from this procedure is easily felt.

Chapter II (pp. 32-45) reviews the content of Nikmeda's "library," which has made Ugarit famous among Semitists. As far as the lexicographical texts are concerned, they must not be valued as a source for Ugaritic culture; they belong to the canon of Babylonian literature. The only conclusion they allow us to draw is that the methods of Akkadian schools had been transplanted to Syria.

Chapters III (pp. 46–56) and IV (pp. 57–78) are devoted to the religious texts in the new West Semitic dialect. The main content of the epics (Ba 'l, 'Anat, Keret; the Danel story was not yet available) is outlined. The author adheres to the Negebite theory and repeats the view that Aser, Terach and Sin-Nikar (allegedly Terach's wife in his function as a moon-god) occur. He fails to mention the opposition which this view has met. If it was impossible to adjust the text of the lectures, which were delivered in 1936, the notes gave ample opportunity of informing the reader of the considerable discussion which has ensued.

Schaeffer's Cuneiform Texts of Ras Shamra can be recommended to critical readers as an introduction to the numerous problems connected with Ras Shamra and its inscriptions.

ALBRECHT GOETZE

YALE UNIVERSITY

THE POTAMIC SYSTEM OF THE TROJAN PLAIN, by A. D. Fraser. Pp. 77, 5 maps. The Jameson Book Store, Charlottesville, Va., 1937. \$1.00

This lithoprinted booklet is based upon lectures delivered to graduate students of the University of Virginia and deals mainly with the course of the lower Scamander River in the Homeric Age. It is the author's purpose "by a close study of the Homeric text, together with a careful observation of the water-courses, to reconstruct a system and to bring a certain degree of order into the chaos that attends the usual Homeric commentary that seeks to explain the phenomena of the plain." The most detailed section, comprising the latter part of the booklet, contains comments on certain passages in the *Iliad*. A considerable portion of the rest of this study consists principally of a digest and survey of a number of problems. There

are remarks on geology, explorations, and excavations of the Troad, and on the nature of the *Iliad*. Copies of three maps of antiquarian interest are incorporated into the booklet. There are also two maps based on the only more or less scientific cartographic survey of the plain of which the results are available—that of Spratt in 1839 and 1840.

In the field of geology, the author mentions certain characteristics of the streams of the plain. The fundamental geological truth needs to be stated, that a meandering stream in a nearly level plain is likely to change its course frequently. This condition makes the author's task extremely difficult. It is to be regretted that a detailed and scientific geological account of this particular region remains to be written.

On the archaeological side, the author examines the position of Troy for any bearing it may have on the main subject. He accepts the positive and definite archaeological evidence for the fact that Troy was at the site near Hissarlik, and he makes this quite plain in discrediting the notions of Charles Vellay in so far as they depend upon unsound archaeology. Yet the identification of Troy is of no great aid towards determining with exactness the course of the streams in the plain.

The same is true about the site of the Greek camp on the Hellespont. Besides, and contrary to the author's assumption, the exact location of the camp on the Hellespont has not been determined to the complete satisfaction of those who have actually visited the region. There is grave doubt as to whether any further discussion of this point can be more than merely academic.

In commenting on passages in the *Iliad*, Professor Fraser states his belief that various sections of the poem may be given relative dates within the Homeric Age, which was approximately four or five centuries long according to him. A note to the final chapter makes the author's position clear: "The conclusions which are here drawn are similar in general to those reached by Christ, *Homeri Iliadis Carmina*, pp. 51 ff., but there are many essential differences. Christ is a supporter of the 'lay' theory."

The present version of the "lay" theory of the composition of the *Iliad* is not an issue from the topographical argument. Instead, it is actually the parent of it. The resulting opinion is that early passages describe the Scamander as flowing in the west part of the plain, passages of somewhat later date indicate a change in course towards the east, and the latest passages describe the river after its

final change, when it has joined the lower course of the Simois and flows through the east part of the plain. The method of dating such passages is neither proved nor explained, beyond reference to the "lay" theory. Simply on literary grounds it is inescapable that such a topographical scheme can not be valid if there are any faults whatsoever in this particular version of the "lay" theory or in its application. A tremendous burden of proof would seem to rest with the author.

Geologically it is not extraordinary that changes in the Scamander took place. What is astonishing is that in a period of centuries precisely these changes took place, and precisely in this order. This would seem to be over-simplification.

From time to time other studies have also been made of Homer in order to reveal something about Trojan topography. It is the opinion of this reviewer that such studies can not go beyond the most general kind of facts. Otherwise it becomes necessary to make several highly questionable assumptions, including: (a) that the poet was interested and in a position to learn and to tell minute topographical details, and (b) that general and poetic remarks may be interpreted for their content of specific, detailed facts.

Professor Fraser takes the commendable stand that it is worth examining a question even if there may be some doubt about the answer. On this particular subject it may become clear in time that more energy might be turned in another direction. Both from the Homeric text and from exploration in the Troad one gains the impression that the so-called topographical passages in the Iliad generally reveal more about the interests and technique of the poet than about topography. Numerous statements in this booklet confirm this impression, as in comments on changes in the poet's point of view, on the vagueness of many of the topographical references in the poem, and on the essentially poetic character of the Iliad. Perhaps this will suggest the possibility not of increasing our knowledge of topography and archaeology at the expense of the poet, but of studying the interests and technique of the poet at certain points through topography and archaeology.

JEROME SPERLING

YALE UNIVERSITY

EXCAVATIONS AT ASEA IN ARCADIA 1936-1938.

Preliminary Report by Erik J. Holmberg. Pp.

30, pls. XV, figs. in text 8. Göteborgs Högskolos Årsskrift, XLV, 1939 .3.Kr. 6.

This brief report is only a preliminary presentation of the material resulting from three seasons of excavations on the site of Asea in southern Arcadia. But since these prehistoric finds, covering the Neolithic, Early Helladic and Middle Helladic periods, are of great importance as the representatives of a little known region of prehistoric Greece, the southern Peloponnesos, it is particularly gratifying that Holmberg has so quickly presented this well illustrated account of his work.

The Neolithic period is present in pure form in a stratum only a half metre deep, above which there is in places another half metre of mixed accumulation showing the gradual transition from the Neolithic period to the incoming Early Helladic culture. In this relatively thin accumulation, Holmberg does not see any division within the Neolithic period, although the ceramic remains are of the types which elsewhere are assigned to both Early and Late Neolithic periods. The architectural remains consist of house-floors and the débris of hearths. There is a rich variety of pottery, most of which is closely related to ceramic finds from the northern Peloponnesos, particularly from Corinth. This new material emphasizes the homogeneity of Peloponnesian Neolithic culture.

But although there is a great similarity in the types of pottery which are being found in different parts of the Peloponnesos, there is an important difference in the relative size of various classes of pottery in the North and in the South. At Asea the finer red, black and gray burnished wares are but scantily represented, while these wares are found in great quantities at Corinth. Holmberg suggests that the "Variegated" ware at least may have been imported from the region of Corinth. On the other hand, the coarse burnished ware found in only a few simple shapes at Corinth is here found in quantity and with a large repertory of shapes. Holmberg is certainly right in considering that at Asea this class of pottery covers the whole Neolithic period, for many of the shapes are of the Late Neolithic type (cf. figs. 3i and 3k with Hesperia vi, 1937, figs. 25b and 11 respectively). This ware seems definitely more likely to be indigenous here than at Corinth. The occurrence of the fine gray ware at Asea also emphasizes the importance of this pottery as a typical Peloponnesian ware. Most important of all, however, is the great quantity of Neolithic "Urfirnis" ware, richer here in variety and presenting better evidence for shapes than has been available heretofore. Holmberg divides the "Urfirnis" ware into two groups, plain and patterned, which are then classed quite separately and the patterned ware is grouped with other painted pottery. It would seem, however, that any system of classification which makes it necessary to class sherds from the same pot in several categories is fundamentally unsound. Since, as Holmberg states, most of the patterned "Urfirnis" vases have large areas that are plain, I do not see any justification for a separate classification.

The Early Helladic strata contain remains of rectangular houses, mostly of a simple two-room type. The major part of the pottery of this period is very much like Early Helladic pottery from the Argolid. Toward the end of this period, however, there appears a class of coarse incised ware, a type well represented at Malthi in Messenia and probably derived from Western Greece. It is at this time that the presence of two waves of influence at Asea is first felt. The incised ware continues and develops in the Middle Helladic period, forming the element of continuity in what seems otherwise to have been a rather sharp rupture in the cultural development on the site. From the Middle Helladic period there is a good series of rectangular houses and a few houses with one quarter-circle end. All of the pottery of the Middle Helladic period is handmade. The largest group of pottery of this period is the Black Minyan. Holmberg suggests a South Peloponnesian origin for this ware. The hill of Asea was abandoned about the middle of the Middle Helladic period, not to be reoccupied until the Late Classical or Hellenistic period, when a walled town was built on the site and in the plain below.

SAUL S. WEINBERG.

CHICAGO, ILLINOIS

ARCHAIC SCULPTURE IN BOEOTIA by Frederick R. Grace. Pp. vii+82, 83 figs. Cambridge, Harvard University Press, 1939. \$5.00.

This beautifully produced book is a welcome addition to recent studies of archaic Greek art. Its theme is the sculpture found in Boeotia from late geometric to late archaic times. Mr. Grace begins with the early terracottas—the bell-skirted figurines, the relief pithoi, the bird-faced figurines, and the figurines with moulded heads—and then proceeds to monumental sculpture, trac-

ing the progression from the early, thick-set kouros of Orchomenos (fig. 70) and its associates through several intermediate stages to the developed kouros from the Ptoan Sanctuary, National Museum no. 20. As the illustrations are numerous and excellent and the text is distinguished by sober common sense and artistic sensibility, the result is notable. We are left with a vivid impression of Boeotia's importance as an artistic center in early times.

Naturally in the present state of our knowledge such studies are bound to be tentative. Complete unanimity on style and chronology among students of archaic art is still out of the question. And yet the reviewer finds herself in general agreement with many of Mr. Grace's assignments; for instance, with the early date, about 600 B.C., of the head, National Museum no. 15 (figs. 71, 72), which by others has been placed as late as the third quarter of the sixth century. Among the major disagreements might be cited the early sixth-century date assigned by Mr. Grace to the battered head, National Museum no. 18 (fig. 22), which, to judge by its developed skull and the advanced rendering of the ear, must in the reviewer's opinion be distinctly later and the late-sixth-century date ("last decade") assigned to the kouros, National Museum no 12. (figs. 80, 81), which in the reviewer's opinion must' be definitely earlier than the kouros, National Museum no. 20 ("universally attributed to the Leagros period"). For the latter is anatomically more advanced; to mention only one important divergence, whereas National Museum no. 12 still has three transverse divisions above the navel in the rectus abdominis, National Museum no. 20 has the fully developed scheme of two such divisions.

Of particular interest and importance is Mr. Grace's view—reached after intensive study of the Boeotian material—that the division of archaic Greek sculpture into separate local schools is impossible: "It is no longer my belief that clearly marked local schools are distinguishable or ever existed in Greek sculpture of the sixth century. . . . It is becoming more and more apparent, on the other hand, that the really significant changes in Greek sculpture during this period were transmitted from place to place very quickly, became, in short, universal to the Greek world almost immediately upon conception." But though Mr. Grace thus boldly enunciates his creed—with which the reviewer enthusiastically agrees and

which she has in fact held for some time-he is not consistent. Again and again in his discussions of individual sculptures he becomes engulfed in the prevalent tendency to assign changes in style to "influences" of other "schools" rather than to the general advance in anatomical knowledge. And so we hear of Samian influence on the kouros of Chaironeia, of possible Naxian influence on the kouros, National Museum no. 10, and of both insular and Attic influence on Boeotian sculpture of the second half of the sixth century. Can we have it both ways? It is obvious, of course, that East Greek sculptures differ from Western in a general way, being usually softer and fleshier. But how can one speak, for instance, of Naxian influence on a particular kouros when we cannot with certainty point to a single contemporary Naxian work, or speak of Samian influence on the Chaironeia kouros when its nearest parallel comes from Thasos

A few addenda: The news of the discovery by Ch. Karouzos of fragments of Boeotian relief pithoi in Tenos (Lemerle, BCH. lxii, 1938, pp. 479 ff., fig. 34) evidently came too late for inclusion in this book. The primitive early statuette in the Walters Collection is now published by Dorothy K. Hill in the Journal of the Walters Art Gallery ii, 1939, pp. 25 ff., figs. 1-3. The late archaic kouros found by Hetty Goldman at Eutresis - one of the best archaic sculptures from Boeotia-should have been included. With so much valuable information scattered through the book an index would have been useful, or at least page references under the illustrations. The typography seems exceptionally good, except for the occasional omission of the wretched German Umlauts.

Mr. Grace may be congratulated on his achievement. In addition to its other virtues the book has a certain literary style.

GISELA M. A. RICHTER

METROPOLITAN MUSEUM

THE TEMPLE OF HIBIS IN EL KHARGEH OASIS.
Part II, Greek Inscriptions, by H. G. Evelyn-White and James H. Oliver, with a preface by H. E. Winlock (The Metropolitan Museum of Art, Egyptian Expedition Publications, Vol. XIV). Pp. xv+71, pls. 13. New York, 1938.
\$3.50.

El Khargeh, the Great Oasis, is the southernmost of the chain of oases running roughly parallel to the Nile valley in the Libyan desert. One hundred miles west of Thebes, it was too remote to play much part in Egyptian history until the Persian conquest, but in the Hellenistic and Roman periods it was an active center of Graeco-Egyptian life, a fertile and populous Isle of the Blessed, comprising nearly eight hundred square miles of area, a large producer of wine and of dates, a stage in the routes to the Soudan and to the more northerly oases, and a convenient place of refuge or exile. The town of El Khargeh, Heb or Hibis in antiquity, with a population of nearly five thousand, lies at the northern end of the district to which it gives its name. Its principal monument of pre-Christian date is the great temple of Ammon, built or possibly rebuilt by Darius and enlarged by Nectanebo II. Before the temple ran the usual ceremonial avenue, ending in a great gateway. On this were inscribed, in the first century of Roman rule, the prefectural edicts which have attracted the interest of historians for more than a century.

The Egyptian Expedition of the Metropolitan Museum began a systematic study of the antiquities of the oasis some years before the War of 1914, and Evelyn-White, as a member of the Expedition in 1909–10 and again in 1911–12 and 1912–13, was able both to study the inscriptions on the spot and to secure a full documentary record of them, copies and photographs. After his death in 1924, the publication of the material was delayed, and its appearance now under the expert editorship of Professor Oliver is the more welcome for having been so long awaited.

The publication is a sumptuous one, fine printing in folio with superb plates, and with the full apparatus of indices, etc., which are, unhappily, not invariably present in volumes of inscriptions. Of the forty-two texts, thirty-five are short graffiti, dipinti, or fragments. The earliest of the other seven is a dedication of the time of Philadelphus, interesting chiefly for its date. The latest are the two dedicatory epigrams of one Hermias, probably an official, who paved the sacred way for a distance of seven hundred cubits, as he claims, although the editor, not without some justification, is inclined to doubt his statement. Oliver argues that there is no seven hundred cubit stretch of road which can come in question, and that the reference is to the hundred cubit avenue leading from the outer to the inner gateway of the temple, which was paved either in seven lanes, or seven fold. In this sense he restores in the second epigram μῆκος ἔ[τ]ει[ν' ἐκατὸν] πήχε[ας έπτ[απόρους], and attempts valiantly to bring into line with this the έπτάκι τοὺς έκατὸν πήχεις of the first. I had rather suppose, however, that Hermias was a poor judge of distance, than that his poet so misstated his meaning. It is easy to bring the statements of the two epigrams together by restoring as the last word of the second ${\rm έπτ}[\alpha πλόους]$.

The importance of the volume, however, lies in the first four texts, or rather in the first three, for nos. 3 and 4 are almost exact duplicates, the three prefectural edicts of the years 49, 59 (not 60 as stated), and 68. All three deal with reforms of the administration. The second is here published for the first time, and the first and third are presented in a much improved text. Both Evelyn-White and Oliver have greatly advanced the reading and restoration, a feat the more to their credit because the texts have long been the object of intense study by the greatest historians and epigraphers. More than this, by their close study of the traces on the stones and of the lengths of the lacunae, and by providing the world of scholarship with completely satisfactory photographic documentation, they have made it possible for future workers to have at hand all the materials necessary for further study, for while the edition of Evelyn-White and Oliver has greatly improved the state of the texts, it has not put them into final form. In the case of the second text, the edict of Vestinus, too much cannot be expected. The stones are terribly worn, and even the subject of the edict is not yet determined. With the third, the great edict of Tiberius Julius Alexander, dealing with tax abuses, a satisfactory text is already almost attained, and the numerous improvements on the text of Dittenberger are admirable. Something may even here be done, however. In line 60 εὐλ[αβ]είσθωσαν seems a curious understatement, and I am dubious of it, while in lines 53-54 ύ[ποθήκ]ης should be ὑ[πογρα]φῆς. In the first edict, that of Vergilius Capito, the problem is harder. For the forty-one lines of columns III and IV, the reader is offered three separate texts, that of Evelyn-White, that of Jouguet, and that of Oliver himself. Some of the preserved parts of lines are very short, and the losses are probably too great ever to be recovered completely. The present publication, in any case, will offer the best stimulus and the best facility for scholars to make the attempt.

C. BRADFORD WELLES

YALE UNIVERSITY

BILDER GRIECHISCHER VASEN, herausgegeben von J. D. Beazley und Paul Jacobsthal. DER LEWIS-MALER (Polygnotos II) by H. R. W. Smith, Pp. 30, pls. 36. Leipzig, Verlag Heinrich Keller, 1939. R.M. 28.

This is without doubt one of the best monographs of the Beazley-Jacobsthal Series. The Lewis Painter, who was heretofore a comparatively little known artist, will henceforth rank among the best known, the best understood, and the most easily recognizable. In addition to an illuminating text, Mr. Smith supplies us with excellent illustrations of practically all of the 34 works assigned to this painter (32 of them by J. D. Beazley), including several not hitherto figured.

As the Lewis Painter decorated only skyphoi and his scenes are remarkably alike, consisting mostly of pursuits, there is less variety in composition than in the works of most known Greek vase painters. Stylistically, however, Mr. Smith (like Beazley before him, cf. AV., p. 149) has been able to distinguish an early, a middle, and a late period-occupying probably the seventies and the sixties of the fifth century. And he is able to suggest the Lewis Painter's immediate predecessors (e.g., the Altamura Painter, the Boreas Painter, and Makron); his closest associates (e.g., the Euaion Painter and the Zephyros Painter); his chief rivals (e.g., the Penthesileia Painter); his chief imitators (e.g., the Mount Holyoke Painter and Agathon) and his most gifted pupil (the Penelope Painter). It is on the whole a remarkably convincing picture exemplifying how profitable can be an intensive study of an artisteven of a rather uninspired one like the Lewis Painter-when carried out by a connoisseur of Mr. Smith's caliber.

Particularly valuable is the detailed analysis of the Lewis Painter's style, with a long enumeration of his characteristic renderings during his three periods (pp. 24-26) - a model of critical acumen. The footnotes contain much suggestive information (e.g., the discussion of the old problem Kephalos versus Tithonos in note 22). Our gratitude also goes out to Mr. Smith for not having been content to illustrate the chief scenes, front and back, of his vases. He turns them round and lets us see the designs of palmettes under the handles (pls. 31-34) - many of them with characteristic blossoms-and then turns them over to show the little circles on the bottoms (which supply a clue for dating) and the occasional graffiti (pl. 30).

That the Lewis Painter's real name was Polygnotos was suspected by Beazley from the Tübingen fragment with the inscription (. . . .] γνοτος [εγρ]αψεν and was proved by the appearance of the skyphos now in Baltimore with the full signature Πολυγνοτος εγραψεν (pls. 15, 23b; D. M. Robinson and Freeman, AJA. 1936, pp. 216 ff.). To avoid confusion with the already familiar vase-painter of that name Smith retains the name Lewis Painter, adding Polygnotos II in brackets. But surely the Lewis Painter should be Polygnotos I. That we knew the other Polygnotos first is a mere chance, and of no interest whatever to future students; but to call an earlier artist second and a later one first is misleading.

Mr. Smith's English text has been translated into German by Paul Jacobsthal, who is to be congratulated on an arduous task admirably performed. But why not follow the excellent custom of most archaeological periodicals of letting the authors write in their own language? Authors and readers would prefer it.

GISELA M. A. RICHTER

METROPOLITAN MUSEUM

FIGURINES FROM SELEUCIA ON THE TIGRIS, Discovered by the Expeditions Conducted by the University of Michigan with the Cooperation of the Toledo Museum of Art and the Cleveland Museum of Art, 1927–1932, by Wilhelmina van Ingen. Pp. xxi+374, pls. XCIII, 2 plans. Ann Arbor: the University of Michigan Press; London; Humphrey Milford, Oxford University Press, 1939. \$5.00.

This book sets a new standard for the publication of figurines discovered in official excavations, especially in its conscientious and open-minded handling of a laborious task. More than one-third of the 1716 figurines are illustrated. The pictures are useful, but many show too strong shadows and the heads might have shown to better advantage had they been lighted from above. It is, as always, necessary to see the figurines themselves in order to appreciate technical differences and plastic subtleties that no illustration can present.

In one way this publication is disappointing and to no one more than to the author herself: evidence for chronology is sadly wanting. The four main levels of the site, ranging from ca. 290 B.C. to 200 A.D. all produced a mixture of figurines without any means of strict dating. Only for one important group, that of the bone and alabaster figures, can the author venture to give a limited

date; she places their chief period in the two first centuries A.D. Thus the publication becomes the most important work for the study of this class of curious bone figures.

One cannot commend too highly the author's restraint in dealing with problems of chronology. She has no preconceived notions and even makes so bold as to suggest that previous assumptions that Parthian art gradually changes from purely Greek to Oriental styles find little support in the facts. "Until much more evidence from Seleucia and from other sites is at hand, it will be impossible to work out a chronological system, if one exists, for the figurines. Meanwhile, the dangers of assuming an orderly development from a Hellenistic to a more Oriental style for small objects such as these are apparent."

Yet this admirable scepticism does not paralyze the author. Courageously has she sorted and clarified a mass of material. Her introduction is as full as could be desired: it gives detailed discussions of the figurines of the Seleucid and Parthian periods in general, with extremely full bibliographies; of the chronology of the group from Seleucia, suggesting the period of greatest popularity for certain of the types; of the technique, including analyses of the clay and the adhesives; and of details of costumes, musical instruments and hairdresses. In commenting on the uses of the figurines, she notes that very few were found in the numerous tombs of Seleucia, a fact that argues against a funerary explanation. Likewise she shows that the purely religious theories are too narrow to cover all the uses.

The types of the figurines are those familiar from Mrs. Van Buren's general study, Clay Figurines of Babylonia and Assyria, to which this publication forms an invaluable supplement. Despite the more limited period and region covered here, the types are varied and by no means all stock. Common are the female figures that must, if vaguely, be related to the Oriental Mother Goddess cult. Reclining types, however, seem to derive from Greek sources, as does the popular Herakles (also common at Tarsus), and the usual draped and human figures of Hellenistic inspiration. Certain apotropaic figures, squatting children, and echoes of Harpokrates show Egyptian influence. Thus the cosmopolitan taste of the Mesopotamian city of the early Roman empire is reflected in her minor crafts, the products of native or naturalized "laborers."

By calling the coroplasts "laborers," the author

suggests that all the figurines from Seleucia are mechanical products of no artistic merit. Actually, the examples now in Ann Arbor bear close examination better than might be expected from the publication. True, many are clumsy and dull to one who forms his standards on Museum specimens of the first water. But to one accustomed to the output of excavations, even in such talented centers as Athens and Corinth, the Seleucian group appears inferior only to the best contemporary work from Smyrna and Tarsus. As character studies certain Seleucian pieces (for example, nos. 389, 454, 897, 911, 1018e, 1164a, 1228, 1252, 1259a) may be compared with the more famous products of those cities. Another set of draped figures (nos. 135, 137, 138a, 140a, 167, 168, 199, 213, 336, 347, 421, 423) is so skillful in the handling of torsion and of baroque drapery in the late Hellenistic manner that one can only hope further excavation in the Seleucid level will yield more of this excellent work. The level of craftsmanship is surely as high as it was on many similar sites, such as Babylon and Nippur. Though few moulds were found, it is clear that this produce was almost purely local; examples of importation are rare (nos. 19, 295, 849, 1198). One might also suspect nos. 279 and 387.

To the student of more purely Greek terracottas of this late period, certain influences from East to West are apparent. For instance, a detail like the deep-cut V neck, which the author finds on the typically Mesopotamian costume of the period, can now be explained on the terracottas from Myrina. Since it does not appear on works of major sculpture in Greece, it evidently derives from Eastern influence penetrating to the coast of Asia Minor as early as the second century B.C. (Cf. Burr, Terra-cottas from Myrina in the Museum of Fine Arts, Boston, nos. 89, 90). Again, the head type with round face, staring incised eyes and heavy nose (e.g., 450b, 692, 1122), which, on present evidence, dates in Seleucia before 200 A.D., foreshadows the features that appear suddenly in Greece in the late third century A.D. This is another bit of evidence, now rapidly accumulating, that the incised linear style came from the Mesopotamian regions into the Roman world. The curious discrepancy in date between the early Roman instances of the bone figures from Seleucia and similar Coptic examples dating from the seventh to the twelfth centuries A.D. is noted, but no explanation offered. This question of the relations of Parthian art, including the important matter of its true character, is searchingly and wisely treated in one of the most interesting sections of the book.

A few details deserve comment. The use of bitumen and plaster as adhesives finds an interesting parallel in the similar use of potter's black glaze in Athens. Adhesives are usually not used on Greek figurines. The mould glazed inside (p. 12) is interesting and to be compared with similar moulds from Pergamon in Berlin; the smooth surface of many Roman figurines suggests that a glazed patrix or glazed mould was often used. It might be mentioned in this connection that the word patrix as employed by printers for the original and matrix for the mould, a usage adopted by German archaeologists, should, for the sake of clarity, be employed also in English works on terracottas (cf. p. 13). A few suggestions might be added: Do the "flexed" toes of the nudegoddess type in certain cases not indicate that she is reclining? The evidence of the Parthian "slipper" coffins and burials in this attitude (p. 19), together with the similar pose of the Graeco-Egyptian "Totenbraut" type support this view. Would it not be safe to call no. 293 Herakles and the bull, an interesting example at this period? Surely no. 355 and its fellows hold a waxed diptych, like the numerous scribe-types of the third and fourth centuries A.D. from Greece-another Egyptian motive? No. 773 and similar pieces find an interesting parallel in a large unpublished figure of Harpokrates in the Museum at Mykonos. The animal on no. 1512 seems so life-like a panther that I should want to know why the author calls it a dog. One looks for slips with little reward for one's pains. Page 32, note 7, should, however, be revised to refer to seated figures with movable arms rather than legs. A seated figure with movable legs is an anomaly not favored by Greek coroplasts so far as I know. But these comments will serve only to reveal the painstaking care given to every detail in a book that shows how dull-looking "excavation junk" can be made to render its riches to the tireless investigator.

DOROTHY BURR THOMPSON

TORONTO

ETRUSCAN PERUGIA, by Chandler Shaw. The Johns Hopkins University Studies in Archaeology, No. 28. Pp. xii+98, pls. 16. Baltimore, The Johns Hopkins Press, 1939. \$2.75.

The aim of this short book, which refers to much old and new literature and to objects in the museum at Perugia is, as stated in the preface, to present a picture of Etruscan civilization as it existed in Perugia. We should expect it, then, to help clarify our ideas about Etruscan manufactures and social organization in general, and to emphasize those respects in which Perugia was unique. That we are somewhat disappointed is due primarily to faulty organization of the book, resulting in lack of emphasis on any point or points. The chapter headings (The Beginnings of Perugia; The Imposing Appearance of the City; Public and Private Life; The Necropolises and the Cult of the Dead; Manufacture and Commerce in the Fine Arts: The Romanization and the End of Perugia) are neither parallel to each other nor logically developed one from the other. The chapters are divided into many short sections, which often seem unrelated to the chapter subjects; and within the sections, objects are described sometimes with meticulous detail and with numerous measurements, sometimes in sweeping general terms. In many cases it seems as if the degree of detail of the description were dependent upon the amount of secondary information easily available, rather than upon the importance of the subject to the reader. The illustrations are not primarily of objects emphasized in the text as typically Etruscan, typical of Perugia, unique in any way, or of especial beauty.

In connection with the illustrations one regrets the waste space in the reproductions and the use of many drawings, including two drawings from very old prints; except in the case of the earring of fig. 22, photographs would better meet modern requirements of accuracy. We would welcome maps of the city and of the countryside to assist us in following the detailed descriptions of them.

Poor organization makes the chapter on the beginnings of Perugia very difficult to understand. We are told that the early Iron Age inhabitants of the region were probably Villanovans, but we are given no idea of a developed Villanovan civilization which may have endured for centuries, or of an Umbrian civilization which would be the only substitute for it. One or the other of these must have filled the time from the early Iron Age down to the period of Etruscan dominance. The only suggestion about a pre-Etruscan settlement on the site is that it was fortified; and this is almost certainly wrong. Then, after thirteen pages of description of early Etruscan finds from the neighborhood we are told that complete Etruscan conquest of the state was not achieved before the end of the fifth century and that the majority of the inhabitants were still of pre-Etruscan stock. Difficult as is the problem of origins, we may ask that it be presented lucidly and with balance, even if it is not to be solved.

We are left in a state of confusion as to the name of the city. In a section on the name (p. 30), the author implies that since the word rasnes occurs on a Perugian inscription, the Perugians must have called themselves Rasena. But if we know what Rasena means, it means "Etruscan." The name of the race does not affect the name of the city, and should not be discussed at this point. Still more confusing is the material on the Roman name of the city. On the closing page we are told that the name after the Roman rebuilding was Augusta Perusia. On p. 25, mention is made of the inscription Colonia Vibia Augusta Perusia on one of the city gates, which is called the Porta Marzia. It is described as if it were two inscriptions and not interpreted. Actually it is one, giving the full title of the colony, according to the standard imperial formula, after its resettlement under the emperor C. Vibius Trebonius Gallus, in the third century A.D. This should rather have been explained to us than the variant spellings of Perusia in Greek and Latin given on p. 31. Further, on p. 23, the long inscription Colonia Vibia Augusta Perusia is said to occur on another gate, the so-called Arco Etrusco; but only the short form Augusta Perusia is there, and we have no reason to suppose that the longer title ever was inscribed.

Among the products of the city the best presented are the urns and sarcophagi. We feel that we could recognize the local varieties. Mention is made on p. 75 of coarse, undecorated pottery made at Perugia, on pp. 75 ff. of Galli's assignment of a school of red-figured pottery to the city (Boll. d'Arte ii, 1922-3, pp. 22-7) and on p. 78 of a local school of bronze mirrors. We wish that these sections on local manufacture had been further elaborated, for archaeologists must soon undertake the most important problem of organizing the products of Italy as those of Greece have long been organized. Toward this end we already have the project for a Corpus of Etruscan pottery (Studi Etruschi, xii, 1938, p. 279) and the studies of bronzes by Neugebauer and Jacobsthal and Langsdorff. To this the volume under discussion contributes little.

DOROTHY K. HILL

THE WALTERS ART GALLERY

The Common People of Pompeii, A Study of the Graffiti, by *Helen H. Tanzer*, pp. xii+113, pls. xlix. The Johns Hopkins Press, Baltimore, 1939. \$3.00.

The author's purpose is (vii) "to show what I think has not been sufficiently emphasized—the light that these inscriptions throw on the life of the common people." She has undoubtedly succeeded. The illustrations are all that could be desired, and it is unfortunate that their profusion and excellence has made it necessary to price the book so high, for it ought to be in college and school libraries.

There is a contrast beween the thorough and scholarly documentation of the text and the translation of the simplest of Latin in the inscriptions that are quoted. The scholar will find five pages of bibliography (97-101) and a complete table of all inscriptions quoted (103-109), as well as full notes at the bottom of the page. The layman will find nearly all the Latin translated for him, though there are many inconsistencies. Sometimes no translation is given (last two lines, p. 66); sometimes the translation is incomplete ("Astyle dormis" (67) is rendered "Wake up!"). A reviewer must take exception to the fact that no style was adopted for printing the inscriptions and their translations. Evidently it would have been better to put all the Latin in italics. Two Latin words are so printed (63), but elsewhere we find the Latin sometimes in quotes, sometimes not; the translation usually in quotes, often not.

I doubt the wisdom of using contemporary slang (e.g., "scram" on pages 51 and 88). In CIL iv, 1136, quoted on page 52, the words nongentum tabernae are translated "ninety shops." I should say that this is impossible, and suggest "nine hundred shops." The word exsi, found in the well-known picture of two men playing at dice (CIL iv, 3494), is taken to be for sex "six." It is reasonable to suggest that it is exii "I have won."

I find it strange that even this book mentions lava as having destroyed Pompeii (95).

However, we may put little emphasis upon such details if we consider the service which the book renders both to teacher and scholar who seek a quantity of readily accessible material that links the life of today with that of Pompeii.

JOHN FLAGG GUMMERE

WILLIAM PENN CHARTER SCHOOL

DIE POMPEJANISCHE WANDDEKORATION VOM ZWEITEN BIS ZUM VIERTEN STIL, by Dr. H. G. Beyen. Erster Band. Pp. xii+370, pls. 60. The Hague, Martinus Nijhoff, 1938. 25 Guilders. Bound: 30 Guilders.

The first volume of Dr. Beyen's history of Pompeian wall decoration answers a need long felt by Pompeianists. Here available for the first time is a collection of the rich material of the second style, arranged in its order and admirably illustrated with reproductions of the complete walls. Since Mau first laid the foundations for the study of the Pompeian styles, much has been written of the individual wall paintings apart from their mural context, but the setting upon which the stylistic evolution depends has been less clearly studied. In his subsequent four volumes Dr. Beyen promises to carry us through the whole history of Pompeian painting. His successful treatment of the formative second style encourages us to look forward eagerly to the other four volumes.

He distinguishes two phases of the second style, each with its subdivisions. The first begins with the closed wall, represented by the Jupiter Temple in Pompeii, walls in Centuripe and Solunto, and the House of the Griffins in Romethe next step is the break-up of the wall, a process visible in the Villa of the Mysteries; in the third step is achieved a symmetrical wall and a free prospect, as in the Boscoreale Villa of Fannius Sinistor, the House of the Labyrinth, and the work from the Villa of Julia Felix (fig. 100). This is the result of the fusion of the theatrical vista, upon which the style draws so heavily, and of the architectural needs of symmetrical house decoration. The Nereid painting of the Villa of Diomede marks a transition to the second phase of the style, which will be dealt with in volume ii. This new phase shows a reaction to pictorial effects, a renaissance of the "picture" as centre of interest in the wall, and a consolidation of the flat surface. At the conclusion of each step in the first phase, a careful analysis is given of the representational content of the wall and of its architectural features, a valuable contribution to the stylistic analysis. The interesting conclusions on the psychology of the style, with which Dr. Beyen opens his book, are reinforced in the concluding chapter. An appendix extends Bulle's analysis (Untersuchungen, pp. 306 ff.) of the relationship between Pompeian painting and stage scenery as it developed from the fifth century B.C. to the first.

If there is one criticism which springs to mind as one reads, it is that any history of Pompeian wall decoration as distinct from painting should include for completeness also the first or structural style. It is a pity that Dr. Beyen has not been able to begin his work at this point, for it is the failure of this style which causes the adoption of the new spatially suggestive technique of scene-painting in the private house. While he is quite right in emphasizing (p. 39) the difference between the variable arrangement above the podium of the first style stucco revetments, and the fixed pattern of broad orthostates between narrow in the second, the advantages of the new technique are not made clear. The innovating second style at first is almost as unsuitable as the first had proved itself to be, for as unmodified scene-painting, its spatial recession had to be reconciled within an architectural framework. In the House of the Faun, where the latest and most ambitious developments of the first style and interesting examples of the experimental second exist side by side, the limitations of both are clear. The living rooms in which the first is employed were too large and too lofty, and the horizontal patterns of the plastic revetments too clumsy and protuberant to give a satisfactory effect; in the rooms of the second style, the painted spatial illusion permitted a lowering of the ceiling with a corresponding expansion outwards of the content of the room. This compensation is quite clear in the oecus of the Nozze d'Argento, where beneath the arched ceiling the second style is framed in a standardized schema. In other words, it has returned to the architectural framework, in which the first style covered the walls of peristyles. It is this achievement which permitted the break-up of the wall. (See AJA. xxxix, 1935, pp. 365-371). Experimental forms, besides those of the House of the Faun, in Reg. vii, Ins. Occid. 13, and in the Villa of the Mysteries, deal with this acclimatization of the projecting columns. The upper register found above the epistyle of the columns in the House of the Faun, Room 43, and in the Villa of the Mysteries, Room 6 (Beyen, pp. 67-8), disappears with the formation of the schema. It is for this reason that I would differ from Dr. Beyen in placing the paintings of the House of the Labyrinth stylistically before those of the Boscoreale Villa. In the former, the theatrical sets are still palpably theatrical; they differ in scale, unlike the sets of the Metropolitan cubiculum which are coordinated in the schema. At the same time the treatment of the background for the figures in the Boscoreale triclinium (Barnabei, pl. viii, fig. 11) is closer to that of the Nereids in the Villa of Diomede. In the House of the Labyrinth such naturalistic pictorial treatment is lacking. Further, the attempt at breaking up the lower wall in Room 46 of the Labyrinth (fig. 96) belongs to the structurally experimental phase.

The second style is an important source book for scenography and ancient perspective. In dealing with the famous passage of Vitruvius which connects the style with the theatre, Dr. Beyen has attempted careful variant restorations of the painted Scaena of Apaturius. This is, however, a development which is to be clearly differentiated from the possibilities of the thyroma stage, as his treatment of the Marissa paintings (figs. 50, 51, cf. 74-76) makes clear. The absence of artificial lighting in the ancient theatre must have necessitated an extremely limited use of perspective within each thyroma and it is questionable whether, except in representing landscape, perspective painting was used without screens and other properties. Naturalism could not have clearly been achieved on the stage, if it was only gradually achieved, as Dr. Beyen points out, in house decoration. I cannot yet agree with Dr. Beyen's belief (p. 69) that the second style paintings prove the ancients' knowledge of one-point linear perspective. This would have enabled them to unify the settings of the thyroma stage in one large painting. For reasons which I have given elsewhere (Art Bulletin xix, 1937, pp. 487-495), I believe that they employed an axial perspective, Panofsky's Winkelperspektive, which contributed to limiting the extent of the painting and led to distortions, which today are purposely introduced into scene-painting.

Dr. Beyen does not commit himself yet on the much vexed question of the original home of the second style. He does say, however, (p. 37) that "er macht überdies den Eindruck einer italischen Erfindung." This is also my own view, and I offer him a small piece of corroborative evidence. The comic setting from Boscoreale (fig. 62a), repeats a motif of a Phlyax vase, which represents the painted background of that stage (Bieber, History of the Greek and Roman Theater, fig. 358); the transmission of the figure on the column, the altar and foliage cannot be accidental.

In a publication which will find its place in every Pompeianist's library, a valuable addition, perhaps contemplated in his next volume by Dr. Beyen, would be a list giving the locale of the surviving second-style paintings in Pompeii and elsewhere.

ALAN M. LITTLE

HARVARD UNIVERSITY

The Excavations at Dura-Europos. Preliminary Report of the Seventh and Eighth Seasons of Work 1933–1934 and 1934–1935. Edited by M. I. Rostovtzeff, F. E. Brown and C. B. Welles. Pp. xxiv+461; Frontisp., figs. in text, 86, pls. 58. New Haven, Yale University Press. 1939. \$7.50.

The increase in size over former reports makes it necessary to remind the reader that the reviewer is forced to dwell on those items only which he thinks the most important. Furthermore, it is needless to say that the excellency of the work done in excavating the material and publishing it leaves very little room for additions or criticism.

A. von Gerkan gives a detailed description of the fortifications and traces the historical development. Some of his conclusions were modified by later investigations, as pointed out in the Comptes Rendues 1937, p. 197 f., and in Rostovtzeff's book, Dura-Europos and its Art, pp. 11 ff. The Mithraeum is dealt with at length. Three building periods could be distinguished: a little before 168 A.D., about 210 A.D. and about 240 A.D., each time an enlargement taking place. Although the essential features are the same as in other Mithraea. a few peculiarities can be noted, namely: it is entirely above ground, not a unique, but a very rare occurrence; a basilical roof with clerestory is most likely; to offset this unusual arrangement, the cult niche of the third period was transformed into a vaulted aedicula, closed on the front by a partition wall and a door; seven steps lead to the platform of the cult niche; the altars are typically Syrian and Mesopotamian. The decoration, unusually rich and well preserved, shows such characteristic Eastern features as the pictures of the "magi" and Mithras as hunter on horseback. The numerous graffiti give us new information on the cult, i.e., on the grades of the mystae. Two details: the discovery of fish-bones under the altar, not found in any other Mithraeum and the conclusion from inscriptions that the first Mithraeum was the creation of the commanders of the Palmyrene bowmen.

Five more temples are described. The two of Adonis and Zeus Theos show the normal type used at Dura and exemplified by the temples of the Palmyrene Gods, of Azzanathkona, Atargatis, and Artemis, as rightly pointed out by Brown. But I must repeat my objection to the assumption that this type is Mesopotamian (cf. AJA. xxxvii, 1933, p. 353). I see in it a "Western" type, developed in Syria and Palestine on parallel lines. The original unit in both regions is the enclosure into which buildings are put, as the need arises. But whereas in Mesopotamia the whole space except the center is filled out and regularization, systematization and centralization take place as early as the third millennium, the arrangement of the "Western" sanctuaries always remains haphazard and irregular, often with free spaces between the chapels (cf. the new sanctuary found at Byblos: Bull. Mus. Beyrouth i, 1937, p. 102 f.); there is also no analogy in Mesopotamia for the chief sanctuary standing free on all four sides as in the temples of Zeus Theos and Artemis (III Season, pl. IV). The staircase to the roof has likewise analogies in Syria (CW. xxxiii, 1940, p. 175; cf. Antiq. xiii, 1939, p. 310), and steps in front of the pronaos-not of the naos-which distinguish the temple of Adonis, Zeus Theos and the Gaddé, are not found in Mesopotamia; (cf. a forthcoming article in the JAOS.). The temple of Adonis, erected ca. 150 to 160 A.D., is the first of this deity ever excavated. A few interesting details might be mentioned: a chapel was dedicated to his mother-consort, here called Atargatis; it contains a stage and seats for the spectators; a number of rooms have benches for banquets; one of the rooms is called a wine cellar in an inscription; a single column stands in front of one of the enclosure walls; fragments of the painting in the naos show the familiar scene of supplicatio, performed by the worshippers in the presence of the god; a relief with the dromedary god was found.

The temple of Zeus Theos was built ca. 110 to 123 A.D. The naos, about seven meters high, still contains the cult furniture; the painting closely corresponds to that of the Palmyrene gods. The history of the temple of the Gaddé is interesting, because it was gradually transformed from private houses. It consisted of two parts, each containing a courtyard with a ring of rooms, one part was the sanctuary proper, the other a "chapter house." The beginnings of the cult go back to the first century A.D., but the chief building period dates to the second century. The type of the chief chapel, namely a "broad" pronaos and a much narrower, almost square naos, has an earlier analogy in the Sun temple at Lachish, which dates

from Persian times but has no relationship to the Iranian type (cf. Vincent, RB. 1939, p. 578, pls. x, xvii). To the Mesopotamian analogies quoted by Brown (p. 323), may be added Wetzel, Die Königsburgen von Babylon i, pl. 2; ii, pls. 8, 32. There are also analogies in Egypt, where this sequence is one of the most characteristic features: E. Baldwin Smith, Egyptian Architecture, pls. 33, 35, 37, 40, 52. The inscriptions and sculptures are almost all attributable to the Palmyrenes. The temple of Zeus Kyrios is a small open precinct with altar and cult relief, to which another court with an adjoining chamber was added later. The cult relief, dated 31 A.D., gives Hopkins an opportunity for valuable remarks about the type and the nature of Ba'al Shamin, whom he sees as the deity. The "Necropolis Temple" is outside the town, but has nothing to do with the necropolis. The dedications to Bel and Iarhibol show that it was a creation of Palmyrenes; three periods can be distinguished, the first being as early as 33 B.C., the second probably about 100 A.D. and the last in 173 A.D. The inscription of 33 B.C. is the earliest Palmyrene inscription known and shows a slightly different style from that of later examples. The term "haikal" is used to designate the shrine.

Hopkins gives an excellent description and stylistic analysis of three Roman shields with painted decorations, one showing the capture of Troy, another an amazonomachy, the third a warrior god to be identified with Arsu, whom he sees also in the helmeted god represented in the "Sacrifice of the Tribune." The style is chiefly "classical," but shows some "Eastern" influence.

Minor finds worth noticing are: a bone plaque decorated with four elks, which shows modified North Asiatic motives, probably comes from a workshop in the region of the Caspian, as Hopkins points out; a green glazed altar goes back to an Achaemenian prototype; a bronze plaque with two undefinable animals might come from the Danube. Bellinger discusses new hoards of coins and adds valuable observations on the mints of Edessa, Carrhae, Rhesaena, Nesibi, Singara, Antioch in the Pontus and in Greece and a paragraph on the "Circulation of Bronze at Dura." A parchment of 86-7 A.D. gives us the text of an agreement among heirs concerning the division of property acquired by inheritance and a papyrus of 227 A.D. the text of the purchase of land on the Chabur, showing that Dura was the center of civil administration for the whole region. The last two chapters contain notes on texts published in *Report VI*, namely on the relief of Ašadū and Ša'dai and on the Tyrian "Komma" of the parchments, and notes on Semitic proper names.

VALENTIN MÜLLER

BRYN MAWR COLLEGE

DIE RÖMISCHEN REICHSBEAMTEN VON ACHAIA BIS AUF DIOKLETIAN, Schriften der Balkankommission, Antiquarische Abteilung IX, by Edmund Groag. Pp. 198. Wien und Leipzig. Hölder-Pichler-Tempsky A.-G. 1939. RM. 12 In this volume Groag lists the officials of the Roman province of Achaea from Caesar to Diocletian, in chronological order. Under each name are given the testimonia, mostly epigraphical, but numismatic and literary evidence is also cited in full. Since Achaea was, for the most part, under senatorial control, the governors held the title of proconsul and were usually of pretorian rank. Under Tiberius and Caligula, Achaea and Macedonia were united with Moesia in a single province and governed by imperial legates. Claudius returned to the Augustan arrangement. Under Nero, Achaea was given "freedom," but the grant was revoked soon after by Vespasian, and Achaea was once more a senatorial province. The leg. Aug. pro pr. is found once under Trajan and once under Hadrian; in the latter case, with the additional function ad corr. stat. lib. civ. Under the emperor Severus, Claudius Demetrius bears the unusual title of proconsul leg. Aug. pro pr. ad corr. stat. lib. civ. It is very dubious whether Claudius could be proconsul and imperial legate at the same time and it is likely that the province was transferred from the senate to imperial control while he was acting as governor. Groag also lists Claudius Leonticus as proconsul and corrector although there is no evidence that he was governor of Achaea.

To students of Roman provincial administration, this work is valuable for reference, but it must be used with caution. It is highly problematical whether Avidius Nigrinus or Armenius Brocchus should be listed as governors of Achaea on the evidence of Pliny's Letters, where there is no express mention of their province. Still more dubious is the creation of a governor named L. Volusenus Catulus from the evidence of a fragmentary Athenian inscription which preserves nothing but the grant of some unknown honor to a woman named Catola. The restoration of the

name L. Munatius Gallus in Corinth viii, 2, 63, is possible, but the fact that a statue was erected in his honor at Corinth does not prove that he was governor of Achaea. The restoration of the nomen Tineius for the cognomen Sacerdos in IG. v; i, 1147, is little more than a guess. This family did not have a monopoly of the cognomen, and no member of the Tinei held office in Rome until much later. In contending that M. Ulpius was descended from a family which gained citizenship through the grant of Trajan, and his proconsulship could not have been held before the end of the second century, Groag seems to be making unwarranted assumptions. Nor do I believe that one can safely date inscriptions from small towns in Greece with any accuracy by letter forms alone. The inclusion of such names as Marius Maximus, Gordian and Valens in the list of governors rests on very tenuous evidence.

The industry of the author is commendable; the plan of his work is excellent, but his imagination should have been curbed and many of his suggestions confined to footnotes. On p. 74 a misprint—Commodus for proconsul—may be noted.

ALLAN CHESTER JOHNSON

PRINCETON UNIVERSITY

DIE LANDMAUER VON KONSTANTINOPEL, BEARBEITET IM AUFTRAGE DER DEUTSCHEN FORSCHUNGSGEMEINSCHAFT. ERSTER TEIL. ZEICHNERISCHE WIEDERHERSTELLUNG. Mit begleitendem Text von Fritz Krischen. Lichtbilder von Theodor von Lüpke. (Denkmäler antiker Architektur, Band 6). Pp. viii+18, pls. 46. Walter de Gruyter & Co., Berlin, 1938. RM. 27.00.

This volume is the first part of a monumental publication of the late antique city wall of Constantinople. The importance of this most extensive and surprisingly well preserved work of ancient military architecture has caused great anticipation in the circles of scholars interested in this field ever since the plan of the publication was announced many years ago. The present volume will certainly not fail to further stimulate interest in the subject, but it will disappoint many scholars. As a matter of fact, the editors have served us the dessert first and left us hungry for the substantial meal. For at least two generations it has become customary in architectural publications to consider the archaeological and architectural evidence before discussing general conclusions and suggesting reconstructions. In this

case, we are offered a richly illustrated volume anticipating the restorations and containing some general "outlooks," and we are promised that the archaeological and documentary evidence will be published later.

Twenty-two plates show reconstructions of sections of the city walls, towers, gates and interiors of towers. One color plate and a restoration of the entrance court of the palace chapel of Aachen complete this set of plates. A few illustrations of sections and a sketchy plan, which does not even allow one to locate the parts illustrated, are added in the text. The restorations, drawn by various students of Professor Krischen, whose names are mentioned in the foreword written by Professor Litzmann, are on the average pleasant and convey a lively impression. Only the motives and the drawing of landscape and staffage figures lack skill and taste in many cases.

The excellent state of preservation of the walls leaves no doubt about the restoration in general. However, the original aspect of the outer wall in front of the Golden Gate (pl. 19) demands serious criticism. In most cases the photographic illustrations on plates 24–45 allow one to compare the actual ruins with the restorations. These photographs are very unequal in quality, many of them appearing too dark in reproduction. But as a whole they are skillfully selected and most valuable.

The text by Professor Krischen is hardly on a higher level than that of a popular lecture. He tries to approach the subject from a purely aesthetic viewpoint and to open broad vistas in the influence of the city walls of Constantinople on early mediaeval German architecture. His thesis, that an abundance of original inventions gives evidence of the architectural genius of the builders and has created models for the future, will have to be tested by historical analysis. The Carolingian motive of the door in the center of an apse, e.g., which he derives from the wall, has a long history in Roman imperial architecture. The only positive contribution of the text is given in an excursus: it deals with the proportional system of the Golden Gate, using a foot of 29.3 cm. in simple numerical relations (pp. 15-6).

No bibliography is quoted. The tendency to create "lebendige Anschauung" (p. vii) has led so far that one of the plates (7) shows a restoration of a non-existing interior.

Thus the book is a strange outsider in the scholarly series in which it has been accepted, a series which was planned to create a new standard of archaeological-architectural publications. In the future it may become a valuable appendix to the monumental publication of this great work of fortification.

KARL LEHMANN-HARTLEBEN
NEW YORK UNIVERSITY

THE STORY OF THE LAMP (AND THE CANDLE), by F. W. Robins. Pp. xiv+155, pls. XXVII. New York, Oxford University Press, 1939. \$5.00. This book is the product of many years spent by the author in collecting lamps and in learning about them. His interests, and likewise the scope of the collection, are not limited by time or space; the twenty-nine chapters describe all illuminating appliances used by man from Palaeolithic bonfires to neon lights and almost all of the many objects which are illustrated come from among the 800 specimens in the collection. But this diffusion of interest has not diluted intellect, for the author brings brains, and very good brains, to bear upon the problems of the subject. Note, for example, his intelligent remarks about shell lamps, or about Egyptian lamps, or his recognition of the absurdity of Petrie's classification of the material from Ehnasya and his own far more satisfactory reclassification. He consistently calls the right turns among lamps of the Graeco-Roman tradition, and since these are not unduly favored in treatment, one may assume that his spotting of the larger problems in other fields is equally reliable and his solutions, when offered, equally reasonable.

Although this is thereby much superior to the ordinary hobby book, it is not likely to become so "indispensable to the museum curator" or to be of such "unusual interest . . . to archaeologists" as the publishers hope, simply because it is so very scantily documented. Had each chapter been supplied with its own list of important source material, this hope might have been realized. But, for example, in eight lines of text (beginning near the bottom of page 41) the date of lamps at Tell el-Hesy, Tell Duweir, Malta, Cyprus and Egypt are mentioned without a single reference even to the titles in the limited general bibliography whence at least part of the information was drawn. It is very much a shame that the necessary ritual of research could not have been followed. Certainly the author's skill would have prevented this from dulling the entertaining story of the lamp, and the result would have been invaluable for the professional as well as interesting for the amateur.

F. O. WAAGÉ

CORNELL UNIVERSITY

DIE RÖMISCHEN KAPITELLE DES RHEINGEBIETES, by *Heinz Kähler* (Römisch-Germanische Forschungen, Band 13). Pp. 100, pls. 23, figs. in text, 14. Berlin, Walter de Gruyter and Co., 1939. RM. 15.

Dr. Kähler's book is a notable addition to the distinguished series which it continues. It is primarily a systematic collection and classification of the Corinthian capitals of the Rhineland, but the resultant catalogue is in itself an interpretation which suggests significant conclusions and illuminates particular problems as they arise. The author is already familiar to students of Roman architecture from his studies of the pillar tombs of the Rhineland (Bonner Jahrb. cxxxix, 1934), the Porta Aurea in Ravenna (RM, 1, 1935), and the Roman gates of Verona (JdI. 1, 1935). The work in hand was originally written as a doctoral dissertation at Freiburg in 1929. It has been revised and enlarged for publication as a result of subsequent travel and study. It has gained an introductory section on the prototypes of the Corinthian capitals of the Rhineland and an accompanying set of seven plates, published as Beilagen after the illustrations to the original text.

The interest of this and similar collections of particular architectural members as adopted in the various divisions of the Roman empire lies in their usefulness as indices of the cultural relationship between the particular region and the Empire as a whole. Detached architectural members are peculiarly suitable as evidence of this sort, because architecture itself is generally more closely bound to its cultural context than sculpture, painting, ceramics, and the other arts. It is rooted in its place and is less subject to continuous influence through import and artistic intercourse with other regions. By and large, in proportion as a particular region lies toward the periphery of a larger culture sphere, the better its architecture can be understood as developing out of itself along its own lines. The two Germanies of the Roman Empire constituted such a more or less self-contained and outlying region, and the feature of its architecture most easily isolated and studied is the Corinthian capital.

In his opening chapter Dr. Kähler restates the more or less familiar history of the normal Corinthian capital during the first century B.C. in Italy. He sees the transition in the last half of the century from the dry, sharp, formalized version of the Hellenistic original to the freer, plastic treatment of natural plant-form as a native Roman or Italic achievement. The development of these two forms in South France during the early empire is pursued in the following chapter. They appear in order during the second triumvirate and the Augustan period, and are largely the work of Italian craftsmen. This early intensive Romanization of the new province quickly produced a provincial culture which in architecture soon freed itself from the direct influence of the center. From the beginning of our era the Corinthian capital of Gaul with few exceptions developed independently.

This introductory section provides the background for the Corinthian capital in the Rhineland with which the body of the work is concerned. Here Dr. Kähler is pioneering. While his catalogue makes no profession of completeness, the body of examples collected is so large (some 200 capitals) that there can be little doubt that the main lines of division are correctly drawn, however much they may be added to or altered in detail. The picture that emerges is briefly this: The intense exploitation of the Rhineland and with it a permanent stone architecture began in Neronian-Flavian times. It was from the neighboring Gaul that the stonecutters of the rising camps and towns brought their craft and the prototypes for their Corinthian capitals. On Rhineland soil these types established themselves and became the starting points of an uninterrupted and purely regional development along two main lines extending into the fourth century. The first is that of the "stark akanthisierte Kapitell," of which an early and typical example is the capital of the Jupiter Column of Mainz. This line was an outgrowth of an early Augustan Italic plastic form in which the helices and volutes were almost entirely covered with foliage. It had worked its way north through South France and the Rhone valley in Augustan and Tiberian times to become the most typical capital of the Rhineland in the years of the Flavian expansion (Type C). Once there, it was developed independently in the second and third centuries as a more and more purely vegetable capital (Types D, E, F, G).

The second line is that of the "Kapitell mit dem wiegenförmige Kelch." It too was the outgrowth of a pre- or early Augustan Italic form, in this case of the severely patterned type. It too was carried north to become a standard type in the Rhineland, especially in the district of Trier. Its dominant "Cradle-Calyx" was seized upon and developed to a highly formalized geometrical schema of its own (Type H).

From these two main lines of development there sprang during the third century many local variations, particularly in the perfunctory carving of smaller capitals. They were characterized by an ever greater loss of formal integrity, lacked helices, cauliculi, calyx, or all three, and show the utmost freedom in the manipulation of the sheaths of foliage (Types J, K, L, M, N, O).

The sporadic importation of capitals from other parts of the Empire where entirely different forms had long since been created had no apparent effect on this general development. It is plain that, after the relatively short period in which the prototypes were transmitted, the Rhineland followed its own artistic bent.

The phenomenon of the growth of regional cultures within the Empire is one which our evidence is daily making more apparent. Dr. Kähler's exemplary study affords a striking illustration of the process at work.

FRANK E. BROWN

YALE UNIVERSITY

DIE HERRSCHERBILDNISSE IN ANTONINISCHER ZEIT, by Max Wegner. Pp. 305, pls. 64. Gebr. Mann, Berlin, 1939, RM, 22.50.

The need for a complete revision of Bernoulli's monumental work on Roman portraiture has long been felt. Wegner's study of Antonine portraiture is the first installment (Part two, volume four) of that revision, which is being published under the auspices of the German Archaeological Institute as Das Römische Herrscherbild. Wegner is its editor. A second installment by W. H. Gross on the portraiture of Trajan (Part two, volume two) has just appeared, and a third has been announced. Both volumes are extremely welcome, for they not only help to fill the large lacuna that exists between the work of Brendel, Curtius, Poulsen and others on the portraiture of the Julio-Claudian period and that of Delbrück and L'Orange on the portraits of late imperial times, but they promise the student ultimate possession of an instrument of study incomparably superior to any previously available to him.

In the first chapter Wegner discusses various

problems connected with the making and distribution of imperial portraits in antiquity and their collection and identification in modern times. He inverts the chronological sequence and begins with a brief section on the interest of the Renaissance in Roman imperial portraiture and the problems of authenticity that the desire of early collectors to possess complete portrait series of the emperors has created for the modern student. Rome, he believes, was not only the chief center of the creation of original portraits, but the center of their reproduction for provincial distribution as well. Antonine portraits were of life size or larger. Only portraits that once formed part of a relief are smaller. But the belief that proportions smaller than life size are virtually synonymous with absence of authenticity does not seem to the reviewer to be in agreement with the evidence. The material of the extant Antonine portraits is almost exclusively marble. No painted portraits survive and portraits in glass and semi-precious stones are negligible. The numerous cameo portraits have been excluded because of the problems of authenticity involved.

In the next seven chapters the extant portraits of the Antonine emperors and their wives are arranged according to types and their chronological sequence convincingly established with the help of coins, the rare dated works, and careful analysis of the style and technique of the portraits. Each chapter is excellent. The greatest contribution is made in the chapter on Lucilla and Crispina, where, by careful analysis of the hair styles shown on their coins and those of Faustina the Younger, Wegner is able to isolate the portraits of those unhappy princesses from the portraits of Faustina. In the chapter on Faustina the Younger he accepts the results of Poulsen, Delbrück, and Hekler in attributing portraits to her identified by Bernoulli as Crispina. The skill with which the chronology of the types of the portraits of Antoninus Pius is established calls for particular praise. On the technical side, Wegner has scattered many valuable observations, particularly on the use of the running drill. Noteworthy for their material are the silver bust of Lucius Verus found at Marengo, Italy, in 1928 and the gold bust of Marcus Aurelius found at Avenches, Switzerland, on April 19, 1939. The bust of Verus is over life size. That of Marcus Aurelius measures 33 cm. in height and weighs 1.65 kilograms. They are, however, sadly inferior as portraits.

Chapter nine is concerned with the centers of

portrait production in the empire. The first part, devoted to the ateliers of Rome, is a useful résumé of the stylistic and technical developments of Antonine portraiture. The part concerned with the provincial centers is a pioneer effort which deserves the gratitude of all who are interested in Roman portraiture. Notoriously little of a specific character has been written concerning provincial centers of portrait production. Wegner's findings show, however, that the situation in respect to provincial production of portraits in Antonine times has changed little if any from that in the Julio-Claudian period. Rome is still the chief center of portrait production for the West. In Gaul, in the western portion of North Africa, and even in Germany there is evidence of local production closely dependent on Rome, but the evidence is slight. In the East, Greece (the province Achaea) is likewise still the chief center of sculptural activity. Egypt shows some local peculiarities, as does Syria. Cyrene and Asia Minor are under the influence of Greece. Wegner makes no effort to isolate sculptural centers in Greece itself Perhaps the evidence is still insufficient, though the Antonine portrait inscriptions would most probably have helped on this point. What is most striking about the Greek portraits is the technical backwardness they show for the most part, however attractive they may be as portraits. Wegner comments on the stylistic similarity of the portraits of Greek workmanship of Antoninus Pius in the Museo del Palatino and of Lucius Verus in the Terme in spite of the twenty years that separated their making. Comparison of the Olympia portraits of Antoninus and Claudius reveals much closer similarities despite the interval of a century. Wegner believes that the fact that cuirass statues and portraits with laurel wreaths are found almost exclusively in the provinces is to be traced to the early legal conception of civil jurisdiction within the pomoerium and military without. It is an interesting observation which fails, however, to take into account the cuirass busts, which are not exclusively of provincial origin.

The various kinds of portraits and the manner and place of their erection are examined in chapter ten. Appended to it is a valuable table summarizing graphically the statuary types and the attributes of imperial portraits from Augustus to Commodus. There is a similar table for portrait busts. The thesis that free standing portrait busts did not exist before Flavian times requires more

support than aspersions on the authenticity of the bronze busts of Livia and Augustus in the Louvre and the post-dating (in any case not later than Claudius) of the bust of Augustus recently found at Fondi. Besides the Caligula bust in Copenhagen, the authenticity of which Poulsen has recently vindicated, and that in New York, there is the unpublished cuirass bust of Claudius in the Piraeus Museum. The section on the circumstances and places of erection of portraits would have gained immensely from a systematic use of the portrait inscriptions. Incidentally, it is regrettable that Wegner has failed to include even the evidence Bernoulli published concerning onetime portraits that are no longer extant. Wegner adopts the theory, which Kruse has recently restated, that official portraits were sent out at the time of their accession. There is, however, not the slightest evidence that this practice had begun in Antonine times.

The extant portraits are catalogued in chapter eleven by museums arranged in alphabetical order. This catalogue suffers from several defects. Most serious is the complete failure, except for the gold bust of Marcus Aurelius, to give dimensions. The inclusion between brackets of forgeries and incorrectly identified portraits in the same list with the genuine is in itself less convenient than two separate lists and is presumably responsible for the absence of consecutive numbering, an absence that is certain to lead to awkwardness of reference, if not actual uncertainty in some instances. Restorations are only briefly listed. The character of the marble is described, if at all, in general terms. Descriptions, though longer than those given by Bernoulli, are too short when the piece is not illustrated. Gross' catalogue of Trajanic portraits shows that these faults are peculiar to the volume under review. The civil war in Spain was probably responsible for the inaccessibility of the Spanish portraits which remain, if they do not appear in Poulsen's Musées Espagnols, for the most part where Bernoulli left them.

In the final chapter is to be found the documentation of the text. It is not arranged in the form of notes to specific items in the preceding chapters, but as *Nachweise* to given pages. The method produces a handsome page of text and considerable inconvenience to the user. Besides a general index there are two helpful indexes arranged according to the present location and the provenience of the pieces under discussion. The plates are excellent and constitute the largest

collection of Antonine portraits available in a single volume.

MERIWETHER STUART

HUNTER COLLEGE

UEBERSICHT DER ANTIKEN GEOGRAPHIE VON PANNONIEN, by Andreas Graf. Dissertationes Pannonicae, Ser. I, Fasc. 5. Pp. 156, one folded map. Budapest, University Press, 1936.

The purpose of this work is to present, especially to the outsider, a survey of researches in the Roman archaeology of Hungary and adjacent areas to the west and south. Heretofore, such data were more or less obscured in rather inaccessible and widely scattered sources.

Graf's attention is focused upon the following aspects: territorial limits of Pannonia and its geographic history; the various ethnic groups, their loci and movements; system of fortification and roads. The author goes into considerable details and his documentation appears to be quite thorough. An especially welcome and helpful feature of his fine accomplishment is the folded map with 406 marked localities. With the mass of references, a separate bibliography would have greatly enhanced the value of this useful book.

VLADIMIR J. FEWKES

University Museum Philadelphia

LES BRONZES ÉMAILLES DE LA PANNONIE ROMAINE, by *I. Sellye*. Dissertationes Pannonicae ex Instituto Numismatico et Archaeologico Universitatis de Petro Pázmány nominatae Budapestinensis provientes, Ser. 2, Fasc. 8, 1939. Pp. 91, pl. 20. Budapest. 25 pengö.

I. Sellye publishes herewith, in Hungarian and French, a considerable amount of enameled bronze found in Pannonia, particularly in Roman settlements along the Danube. This material comes mostly from accidental finds, and is dispersed through numerous provincial museums of Hungary, Austria, and Jugoslavia. It is now for the first time arranged systematically and rendered accessible. In a short introduction Sellye compares the material from Pannonia with the finds in Gaul and on the Rhine limes. Deciding that both groups are identical, the author comes to the conclusion that the enameled bronze ornaments of Pannonia were imported from Gaul and western Germany. This he explains by the active trade between the towns along the Danube and the Gallic provinces. Up to the present there has been

found no indication that this material was produced locally. Through such trade relations, the Gallic enameled bronze ornaments penetrated still farther to the East, reaching the Oka, Volga, and Crimea.

Because of the accidental nature of their discovery, these objects, with two exceptions, the fibula from Keszthely and the button from Tata, cannot be dated by the circumstances of their finding. For dating them, Sellye was forced to depend on similar objects from the West, which are usually referred to the second and third centuries. Of greater importance is the material from the territory of the Jazyges, who were settled between the Danube and Tisa-Theiss. This comes from more regular excavations and can be dated on the basis of the works of Párducz. The enameled fibulae from the land of the Jazyges belong to the period from the middle of the second century to the second half of the third century.

The reproductions on the plates are very good, but they are inadequate, as they do not render the colors. The descriptions of particular objects are very short, and do not describe the technique and the color of the enamel. Apparently the author did not have a very clear idea of the technical side of enameled bronze, and was virtually uninterested in it.

It seems to me that the spread of small bronze enameled ornaments is due less to trade than to the extreme popularity of these ornaments among the Roman soldiers. The Roman army was the principal consumer of this extraordinarily developed branch of industrial art. In fact, nearly all the Roman frontier camps are marked by finds of enameled fibulae, buckles, and lockets, and this applies not only to the fortifications on the Rhine and the Danube, but also to the towns of the Syrian frontier. The excavations at Dura-Europos on the Euphrates, a Roman frontier fortress, have furnished examples of the same enameled ornaments, absolutely identical in type and technique with the bronzes from Gaul and hence with those of Pannonia. In the material found in Dura there are exact copies of the objects reproduced by Sellye on plates III, 4, 20, V, 7, 22, VI, 28, IX, 17, X, 21, XI, 15, XIV, 13, 14, XV, 14, 28, 30. The bronzes from Dura cannot be later than the middle of the third century, when the city ceased to exist.

Up to the present, the usual explanation of the origin of the enameled bronzes has not been seriously questioned. Their abundance in Gaul, the

finding there of the remains of workshops (Villa d'Anthée), and the tradition of Celtic enamel seemed to confirm the correctness of its localization in Gallia Belgica. Thence this technique penetrated into England, Ireland, and apparently also into the western German towns. Similarly, the finding in Dura of a clay mold used for casting lockets of the type of pl. XV, 30 leads to the conclusion that there were attempts to produce colored enameled bronze ornaments at other Roman garrisons. As a matter of fact, the enamel workshop requires exceptionally few tools, and the workmen could easily move from one place to another, carrying with him all his simple requirements. The casting and enameling of fibulae and pendants could be done anywhere, requiring only a small supply of colored glass. There is no doubt that these workshops were artistically dependent upon the Gallic center. They merely copied and imitated the product of Gallic industry, without any attempt to create new styles of ornament. This uniformity of type is probably to be explained by an extraordinary uniformity of requirements and demands of the Roman soldiers, the principal consumers of these ornaments.

N. TOLL

YALE UNIVERSITY

The Elizabeth Day McCormick Apocalypse, Vol. I. A Greek Corpus of Revelation Iconography by Harold R. Willoughby; Vol. II. History and Text by Ernest Cadman Colwell. Pp. xxxviii+602, pls. lxxii; pp. xiii+170, pls. V. Chicago, University of Chicago Press, 1940. \$25.00.

The first volume of this work contains an Introduction by Juliette Renaud which treats the Apocalyptic frescoes of the monastery Dionysiou on Mt. Athos and the related cycles in Xenophon and the Portaitissa of the Lavra, showing that despite modifications in the direction of Byzantine types and style, these frescoes are dependent on the wood-cuts with which Cranach illustrated Luther's Bible of 1522-23. To this volume also Professor Colwell has contributed two chapters on the history and content of the McCormick codex, in which he inclines to identify Maximos the Peloponnesian, author of the vernacular translation of Revelation which constitutes the text, with Maximos of Gallipoli, translator of the New Testament into modern Greek. The text and its illustration date early in the seventeenth century.

The book once belonged to Parthenios of Larissa, an ecclesiastic well known as a bookcollector, and he seems to be responsible for its elegant binding, done in a style that is a Turkish-Venetian variant of the Persian type, and probably executed in the Douskos monastery in Thessaly. The 69 miniatures of the codex form a cycle of Apocalyptic illustration that is unique, showing none of the filiation from Occidental art which is exhibited by the Athonite frescoes and complete originality vis-à-vis the meagre Byzantine attempts in this direction, usually limited to the author-portrait alone. The Apocalypse itself was not admitted into the Orthodox canon until the fourteenth century, and no commentary on it appeared in East Christian literature before the sixth; the commentary by Andrew of Caesarea, of this century, is mainly the source of the commentary accompanying Maximos' text. The late entrance of Revelation into the Byzantine canon explains the rarity of Greek texts of the book; nearly one-half of them were made after the fall of Constantinople, and it is evident that the late popularity of the text contained an element of irredentism. The worshippers of the Beast in Maximos' miniatures are represented as Turks, and in the "Siege of the Holy City" we can recognize a rendering of Constantinople, with Turkish besiegers impersonating the hosts of Gog and Magog, just as German illustrators of the theme made the City into Vienna and the besiegers Turks, in allusion to the siege of Vienna in 1529.

Professor Willoughby's exhaustive treatment of the miniatures is prefaced by an excellent summary of Latin Apocalyptic illustration, and a history of types and details of iconography surviving in Maximos' pictures. Such are the John-Prochorus author-type, originating in the tenth century, rare in the Comnenian period, and revived in the fourteenth and fifteenth centuries; the "Queen of Heaven," clearly of German origin; the horses with knotted tails, nails in their hoofs, and rounded necks and bodies, inherited from Persian renderings; the two-bladed sword which the miniaturist borrowed from the sword of Mohammed and Ali; the Lamb of God, with his cross-inscribed banner, an exclusively Latin type, prohibited for East Christian art by the Council in Trullo of 692; the miter-crown, introduced into imperial insignia by the Comneni, etc.

The author pays handsome tribute to the Princeton Index of Christian Art for its aid in compiling his extraordinary iconographic apparatus, but his results show that he has gone far beyond the resources of the Index. The miniatures of Maximos are not of great artistic consequence, and the cycle, however original, is for its very originality and late date of minor importance in the history of Christian iconography. But as a revelation of Greek religious thought and imagery of the early seventeenth century, and as a reservoir of miscellaneous tradition, the series of pictures is intensely interesting, and out of this material Professor Willoughby has created a text that is fascinating to read, enlivened as it is with the enthusiasm of his penetrating research.

In a work of so much detail, errors are inevitable, but the reviewer noticed but few that he was competent to judge—the Octateuch of Smyrna, dated in the eleventh century on p. 100, is generally now assigned to the twelfth; the ivory casket "of the tenth century" (p. 557, note 15), cited from Grisar as exhibiting "twin peacocks flanking the tree of life," is of the twelfth century, the birds are not peacocks, and the "tree of life" is the ornamental motif known as the "Sassanian palmette."

C. R. Morey

PRINCETON UNIVERSITY

ITALIENISCHES EMAIL DES FRÜHEN MITTELAI_C TERS, by Yvonne Hackenbroch. Pp. 68, pls. 32. Basel and Leipzig, Holbein Verlag (Ars Docta Band II), 1938. RM. 12.

Within the last years several books have appeared on special branches of the history of mediaeval enamels. Each adds a little more to our knowledge of the subject. In her doctoral thesis, Miss Hackenbroch has attempted a grouping of the earlier Italian enamels. The scope of the book may be judged by the chapter headings: Early Work, Milan, Unknown Origin, Roman School, Monte Cassino School and Sicilian School. The text is conveniently arranged and both the bibliographies and the plates are splendid, many objects being adequately illustrated for the first time.

In spite of its general excellence, there are a number of points with which I am not in agreement. The Beresford-Hope cross in the Victoria and Albert Museum is not Italian, but Byzantine in origin, and should be compared with the bookcover from Constantinople in the Marciana at Venice. The Morgan-Oppenheim reliquary seems to me to date from the ninth century, rather than ca. 700 A.D. The Alfred Jewel, although vaguely recalling Langobard enamels, has an entirely

different quality and I feel the idea of an Anglo-Saxon origin need not yet be abandoned. In the discussion about St. Stephen's crowns, the Byzantine portions are not distinguished from the Roman and in the section on the Monte Cassino school the old texts that mention enamels are not utilized. Morey (in the Art Bulletin ix, p. 595) has demonstrated that the Vatican cross was probably made in Rome in the first quarter of the ninth century. Von Falke's suggestion that the Guelf and Velletri crosses are Milanese in origin is not discussed.

The early enamel described on page 14 is now in the Dumbarton Oaks Collection. Recently there were in the New York Art market several Italian enamels like the medallion of Christ in the British Museum. At Gnesen in Poland there are two more enamels like those on the Stockholm mitre.

The question as to the enamels possibly made in Venice—a very ticklish subject—has been side-stepped, for this would probably require more scope than a doctoral dessertation would allow. I see no reason, however, for the omission of the enamels on the Impérial mantle at Nuremberg, that were made in Sicily, or of the second mitre in Southern Italy. In spite of these faults the little book is one of the most convenient to use that has been published about enamels.

MARVIN CHAUNCEY ROSS

WALTERS ART GALLERY BALTIMORE

GLI SMALTI DEL MUSEO SACRO VATICANO. (Catalogo del Museo Sacro della Biblioteca Apostolica Vaticana, vol. II), by *E. Stohlman.* Pp. 66, pls. XXXV. Città del Vaticano, 1939. 200 lire.

Professor Stohlman has done a great service to all students interested in enamels from the Byzantine period to the Renaissance in publishing a catalogue of the collection in the Museo Sacro. Hitherto there existed only the very old catalogue, without illustrations, published by Bourdery. The new catalogue gives a description and an illustration of each item, so that one has easily at hand all the material now in the Museo Sacro.

The catalogue section fulfills the needs of students of the subject and avoids for the most part controversial attributions. I find myself, however, in as little sympathy with the attribution of certain thirteenth-century enamels of the Limoges type to Italy as I do with Dr. Hildburgh's theory

that all early Limoges enamels were made in Spain. (The theory that the titulus on the Anagni cross did not occur in Limoges work can be disproved). In the catalogue section it would have been better not to mention any comparative material than merely to have done it occasionally and haphazardly. The bibliographies too could have been more extensive. These, however, are minor criticisms and do not detract from the usefulness of such catalogues for specialized students.

The Lamb of God (no. S 61, pl. XX) is not localized in any country. In the Walters Art Gallery is a Magi on horseback from an Adoration scene in the same crude enamel, which was formerly in the collection Simon at the Chateau de Bach in the Bas—Limousin.¹ Perhaps this and the Vatican enamel were from some workshop located in the Limousin region for there were certainly more than the big workshops in Limoges. The copper cross (no. S 108, pl. XXVII) is certainly not ninth-tenth century but later provincial work.

The group of enamels that are discussed in the introduction under the heading England, Germany and the Meuse have long interested me. As evidence for the English origin of the group, the author adduces English manuscripts; for the probability of a Mosan origin, his arguments are based on colors, and in favor of their German origin, he points out that their technique is similar to that of works of Welandus of Hildesheim. The latter seems to me a surer basis for localization than the others. I believe, however, that they were made in Saxony rather than in Hildesheim.

In suggesting that these enamels were made in Saxony comparisons can be made with manuscripts, enamels and metalwork. Two leaves from a manuscript formerly in a Westphalian collection and now in the Cleveland Museum of Art ² have figures that are comparable to those in the enamels; the manner of rendering high lights by lighter stripes of color is the same. Figures in the miniatures hold scrolls very like those held by the prophets and apostles on the plaques in the Louvre and Victoria and Albert Museums while the crowns worn by the man and the woman on the upper half of the second page are like those

¹Cf. E. Rupin, L'Oeuvre de Limoges, Paris, 1893-4, fig. 417.

² W. Milliken, "Manuscript Leaf from the Time of Duke Henry the Lion," Bull. Cleveland Museum of Art, 1934, p. 35.

worn by the Magi on the enamel in the Vatican. Furthermore the background in the manuscript is filled with scroll work like the vermiculation on the enamelled plaques. Lastly there is an outline around the figures recalling those about the scenes on the enamels and an elaborate frame for the whole. All these comparisons are again true of the manuscript in Trier 3 where the scroll work is given even greater prominence as also in a manuscript in the British Museum.4 The crowns on the Magi may again be compared with those on figures in a manuscript of Henry the Lion at Gmunden.⁵ The loin cloth of Christ is arranged similarly to that in a manuscript made for Gertrud, Henry the Lion's daughter, now in the Walters Art Gallery.6 Scroll work that may derive from vermiculation is found in niello work on the arm-reliquary of St. Lawrence, formerly in the Guelf treasure in Brunswick.7 The scroll border on the Louvre and London plaques recalls that on the silver frame of the St. Demetrius plaque 8 formerly in the Guelf treasure and now in the Schlossmuseum, Berlin.

The comparisons with other monuments from Saxony and with pieces in the Guelf treasure could be multiplied, but these made in the preceding paragraph seem sufficient to me to localize this particular group of enamels in Saxony in the late twelfth century. It was here alone that all the elements pointed out by Professor Stohlman would naturally be found. The enamelling of this region was always closely connected with those of Hildesheim and the Mosan region. Henry the Lion married as his second wife, Mathilda, daughter of Henry II of England, thus explaining the English elements and the vermiculation that is only found elsewhere at Limoges, for Mathilda's son became Duke of Aquitaine. So, historically, as well as on the basis of style and comparisons with other monuments localized in this region these enamels should be attributed to Saxony.

The format of the book lives up to the standard set by the earlier volume in this series on the

ivories in the Museo Sacro. The plates are excellent. In short this is the most important catalogue of enamels that has been issued in the last decade or more.

MARVIN CHAUNCEY ROSS

WALTERS ART GALLERY

BALTIMORE

Annual Bibliography of Islamic Art and Archaeology, Vol. II, 1936, edited by L. A. Mayer. Pp. 77. Jerusalem, Divan Publishing House, 1938.

We bring to attention herewith this second volume of the Bibliography, which continues, or where possible, improves upon the good work of the first. The roster of collaborators suffices to guarantee maximum coverage in each subject; particularly noticeable is the large number of Arabic, Russian and Turkish titles, most of which are commendably translated into English. For the person whose interest in Islamic art is merely general, or for him to whom this field is peripheral, the sections "General" and "Islamic Influences" contain noteworthy items. Even the seekers after non-Muslim antiquities will find the range of possible fruitful search extended by titles under "Excavations" or under "Collections: Sale Catalogues," where the listing is very extensive.

F. O. WAAGÉ

CORNELL UNIVERSITY

CAHERCOMMAUN, A STONE FORT IN COUNTY CLARE, by H. O'Neill Hencken. The Extra Volume of the Royal Society of Antiquaries of Ireland for 1938. The Royal Society of Antiquaries of Ireland. Dublin, 1938. 5 s.

Mr. Hencken, the leader of the Harvard Archaeological Expedition in Ireland follows up his reports on the Bronze Age Cairn of Knockfast and the tenth-century A.D. Lake Dwelling of Balinderry Crannog (*Proc. R. Irish Acad.* xli, C, 11; xliii, C, 5) with the publication of an Irish stone fort located in County Clare, the region on the west coast of Ireland between Galway Bay and the Shannon River.

Irish stone forts of the Christian period are imperfectly known, and Cahercommaun is the first of its region to be systematically explored. Located on a steep cliff, it was fortified with a massive inner wall. Through two large concentric enclosures for cattle a paved road led to a large entrance gate. A subterranean structure, which issued into a crevice, apparently provided means

³ F. Jansen, *Die Helmarshausener Buchmalerei* zur Zeit Heinrichs des Löwens, Hildesheim, 1933, figs. 28 and 29.

⁴ Op. cit., fig. 23. ⁵ Op. cit., figs. 21, 22. ⁶ Adolph Goldschmidt, "A German Psalter of the twelfth century written in Helmarshausen," Journal of the Walters Art Gallery i, 1938, p. 20.

G. Swarzenski, "Aus dem Kunstkreis Heinrich des Löwen," Staedel-Jahrbuch, 1932, fig. 326.
 Op. cit., fig. 275.

of escape. The dozen structures within the wall may have housed some forty people. One of them is identified as the house of a chief, another as a kitchen and a building for servants, still another may have housed the iron workers.

The objects found permit us to form a fair idea of the life of Cahercommaunians. Querns indicate that the inhabitants used, and therefore probably raised corn. They kept a great number of oxen and a few goats and sheep. They worked iron, as is shown by pieces of iron slag, and they used this metal freely for knives and various implements. Nails and a door-hinge show the use of iron in the wooden superstructure of the houses. Bone was much used for spearheads and arrowheads and a variety of other purposes. One incised bone fragment seems to carry an ogham inscription. An interesting item are the four stone axes, which would appear somewhat out of place in a late Iron-Age settlement. Mr. Hencken quotes parallels from other Irish and English sites of post-Roman date and suggests that they "served some special purpose or perhaps (were current) for their value as charms." It would be tempting to interpret them as "thunder-stones," since Blinkenberg (The Thunderweapon in Religion and Folklore, Cambridge, 1911) has shown that stone implements were given ritual significance from the Stone Age on, or at least from the early Iron Age down to modern times, with Scandinavia a great stronghold of this belief.

The occupation of Cahercommaun in the early ninth century A.D. coincides with the beginning of extensive Viking raids upon Ireland, but "there is very little to suggest Viking influence." The few objects of luxury not produced by the settlers themselves all belong to Irish types: a gold-plated silver brooch, the decoration of which Mr. Hencken compares to the ornament of the English Cutbercht Gospel, and an enamelled pin head. Only the glass beads and bracelets might be suspected of foreign origin. This raises an interesting problem. Mr. Hencken mentions a workshop for making glass studs, which was found by the Harvard Expedition in the lowest stratum of occupation of Lagore Crannog. Woods-Martin (The Lake-Dwellings of Ireland, 1886, p. 125) asserted that lumps of blue glass in an unfashioned state have been discovered in connection with crannogs, which yielded beads of exactly the same color and matter. Yet Macalister (The Archaeology of Ireland, 1928, pp. 157 ff.) thought that the more highly ornamented beads were imported. Glass beads of similar character are apparently regarded as locally made in England, where they were found in tombs of the seventh century A.D. (Leeds, Early Anglo-Saxon Art and Archaeology, 1937, pp. 99, 107). It seems to be established that from the Bronze Age on Egyptian and, later, Italian beads reached the British Isles (Willvonseder, Germania xxi, 1937, pp. 91 f.); it would be important to determine whether and when they were displaced by local products, and whether native glass industry was an achievement of the Dark Ages.

Students of folklore will be interested in the foundation burial brought to light in Caher-commaun—a skull had been placed in a souter-rain, carefully surrounded by small flat stones, and an iron hook with two iron knives had been placed beside the skull. The presence in the fort of some human bones, which seem to have been intentionally broken, also arouses dark suspicions.

Cahercommaun furnishes us with a vivid commentary on the contrast of the highly cultured life in the monastery and the highly primitive life in the country in Ireland of the early ninth century. Churches might be built, theology, geometry, and geography discussed in Latin, and beautiful manuscripts illuminated in Kells, Durrow, Clonmacnoise, and Armagh, but out in Cahercommaun people lived in rude huts, tended their cattle, fought their neighbors and led in general much the same life as their pre-Christian ancestors.

GEORGE M. A. HANFMANN

HARVARD UNIVERSITY

Opgravingen op het Domplein te Utrecht, Wetenschappelijke Verslagen IV: De Opgravingen in Juni en Juli 1935, by C. W. Vollgraff and G. van Hoorn, Pp. 129-161, figs. 73-96, pls. XXXVII-LII; Haarlem, 1938.

This fourth fascicule of the excavations in the Cathedral Square of Utrecht, paged continuously with its predecessors (previously reviewed in this JOURNAL) carries the explorations farther southward. Almost the whole Square lies within the Roman camp, but the area here described (20 x 10.25 m.) produced little of more than local interest. This much, however, is discussed and illustrated with the same thoroughness that has characterized the previous work of these editors. Separate discussion is given to the finds of A.D. 300–1000, the latest Roman camp, the second and

first wooden camps, the small finds of Roman, mediaeval and later periods, including a ceramic musical instrument (?) and numerous roof-tiles, stamped similarly to those previously found. The small finds are illustrated in the text, while the generous photographs and plans in the plates deal with the larger aspects of the excavation.

HOWARD COMFORT

HAVERFORD COLLEGE

LA CATHÉDRALE DE GRENOBLE DU IXE AU XVIE SIÈCLE, by *Pierre David*. Pp. 116, pls. XIII. Paris, Picard, 1939.

M. David, although he has been professor at the University of Cracow, is a native of Grenoble and has made many studies of mediaeval art in Dauphiny. In this small volume, he has discussed more than the title implies, for he traces the history of the cathedral from the fourth century, when it was the mater ecclesia of the region, through its various dedications, including that of the eighth century when it was dedicated to Our Lady, as most of the French cathedrals were at that time, through the restorations of the present building in the nineteenth century, the major restoration of which was that by Alfred Berruyer in the 1860's. In chapter IV, M. David discusses the foundation of the present building and concludes that the traditional date of 950-1000 A.D., during the episcopacy of Isarn, is correct. By a study of the six capitals, now in the Museum Dauphinois, he concludes that the cloister was built by Saint Hugues, early in the twelfth century. Chapter IX is devoted to a study of the chapels, altars and chapellenies (endowed masses) founded in the cathedral, especially from the fourteenth century on, when the burghers of Grenoble became wealthy. In an appendix, M. David gives his reasons for seeing in the chapels given by Jean Volon, Antoine Giroud, Baile and Orand, all of which date from about 1510, examples of the workmanship of Martin Cloftre, a sculptor of Grenoble, whose work is not yet sufficiently known.

For anyone who is interested in the French cathedrals, this study will be enjoyed, for it gives not only a historical and archaeological account, but a full-length biography of the cathedral which permits one to know it intimately through the many centuries of its changing and vital existence.

AGNES ADDISON

University of Pennsylvania

TAPAJÓ POTTERY, by Helen C. Palmatary. Pp. 136, figures 58, bibliography. Göteborg, Ethnographical Museum, 1939.

The vast Amazon area is generally considered to be of particular importance in South American archaeology. This impression arises from various scattered finds, some of which have been published, and also from deductive reasoning. On the whole, however, very little is known of sequence and chronology; lacunae are many, and archaeological terra incognita prevails in abundance. It is only natural, therefore, that a systematic study aiming at a better understanding of Amazonian antiquity, should be deemed a welcome and a valuable contribution. The pioneering work of Miss Palmatary, her first publication in archaeology, is indeed an attainment of special merit. She was first attracted to Tapajó pottery as a graduate student in anthropology at the University of Pennsylvania. The Tapajó collections at the University Museum, the Heye Museum, and the Göteborg Museum provided the main basis of a fertile subject for a tedious but determined study. Unable to visit Brazil (until 1939), Miss Palmatary yet had the excellent advantage of drawing information and advice from Mr. Curt Nimuendajú, a practically encyclopaedic source on the Amazon. Miss Palmatary's study benefited from her mature logical orientation, from her discriminating sense of pursuing that which was truly significant to her purpose, as well as from her keen appreciation of art. The result is a concise, methodical, and clear description of a complex group of Tapajó pottery, revealing also extraterritorial comparisons and correlations.

"The principal site from which Tapajó pottery has been obtained is Santarem; this is a city located at the mouth of the Rio Tapajoz, a large southern tributary of the Middle Amazon. The Tapajó were a numerous and powerful people when the first Europeans ventured into the heart of South America over the Amazonian highway, but, like many other aboriginal groups, gradually succumbed to the cruelties and superior weapons of the white man. A few remained on the Rio Tapajoz until about the middle of the eighteenth century when the Mundurucús descended upon that valley and eventually became masters of it" (p. 3).

In section III, entitled "Stylistic Analysis" (pp. 7-53), a classificatory grouping and detailed descriptions of forms and designs are presented. The numerous subdivisions devised by Miss

Palmatary distinctly aid the reader by the orderliness so achieved. Larger vessels, smaller vessels, and elements such as rims, handles, figurines and their features, comprise the three major categories of the analysis. The various components of these categories are conveniently grouped into logical types. The treatment is governed by the criteria of form and design and is, therefore, essentially artistic. (Physical properties, qualitative details, and technologic aspects are not considered; these, Miss Palmatary well realizes, must be reserved for a competent specialist in ceramic technology.) Tapajó pottery comprises a variety of forms and designs. Caryatids, anthropomorphic vessels, theriomorphic and anthropomorphic figurines, footed vessels, tripods, concentric dishes, etc., are invariably so well shaped that precise identification is readily attainable. The decorative techniques include incising, punctations, applied relief, and painting. On the whole, the bulk of the pottery reflects considerable technical skill and general knowledge of ceramics on the part of the original makers.

The Amazon area is easily accessible via its intricate and far reaching system of water-ways. The distance from the Amazon estuary to the Caribbean islands or to the coast of Middle America is not so great as to preclude contacts by sea even with the limitations of simple craft. Indeed, certain archaeological evidence indicates that some such traffic actually existed in antiquity. Moreover, Miss Palmatary ably argues, from comparative studies, in favor of ". . . possible correlations between the Middle Amazon and certain cultures to the north, chiefly those of British Guiana, Venezuela, Panama, Costa Rica, the Antilles, and some areas of the Southern Mounds" (p. 59). By "Southern Mounds" is meant the mounds of the Mississippi Valley and the Southeastern area of North America, and the term is used as a generalization. The chief criteria for correlation are drawn from eye-forms, crescentbased figurines, caryatids, four-lobed vessels, the double-headed motif, the sigmoid scroll, hollow rims, supports, etc. On the whole, such features are distinctive, and the stated comparisons inspire confidence.

It will doubtless seem like heresy to some, if not many, to read Miss Palmatary's conclusions that Tapajó pottery may have been derived from that of the Mississippian and Southeastern mounds. Such a thoroughly unorthodox concept is naturally incompatible with the teachings on which many archaeologists have been nourished. And yet it seems safe to anticipate rational reactions and new stimulus to further studies of the new vistas opened by Miss Palmatary. Her pioneering contribution will remain a solid basis from which to pursue further investigations. She is fully cognizant of the urgent need of filling the existing gaps, and specifically points out several problems and the ways to approach them.

Miss Palmatary's contribution combines the advantages and disadvantages of a pioneering synthesis. Her modesty and sobriety might possibly be mistaken for weaknesses, whereas they really constitute admirable virtues. With so many temptations on all sides, a less discriminate methodology might easily lead to unwarranted excursions of fancy. It is significant to stress that Miss Palmatary is cautious in her deductions and that she carefully qualifies her conclusions on the whole as possibilities, not necessarily definite finalities. Whatever may be the results of further work arising from the leads of the meritable study under review, its fine presentation of the salient features of Tapajó pottery will remain a valuable and dependable source. The uniformly good illustrations, half-tones and line drawings, and the bibliography certainly increase the value of the book for reference. The usefulness of the map, prepared by Dr. Kaudern (p. 2), is deplorably diminished by incorrect names for several of the southern tributaries of the Amazon, and by the misplacement of Santarem. The river named on the map "Tocantins" actually marks the Tapajoz. The position of the city of Santarem should be changed conformingly, i.e., to the confluence of the Tapajoz with the Amazon.

VLADIMIR J. FEWKES

University Museum Philadelphia

ARCHAEOLOGY OF SANTA MARTA, COLOMBIA, THE TAIRONA CULTURE, by J. Alden Mason. Part II, Section 2. Objects of Pottery. Appendix on Ceramic Technology by Donald Horton. Pp. 275–418, figs. 26, pls. 85. (Anthropological Series, Field Museum of Natural History, vol. 20, no. 3), Chicago, 1939. Price \$2.50.

MOYAONE AND THE PISCATAWAY INDIANS, by Alice L. L. Ferguson. Pp. 44, pls. 4, maps 3. Washington, 1937.

STYLE TRENDS OF PUEBLO POTTERY, by H. P. Mera. Pls. 67, map 1 (Memoirs of the Labora-

tory of Anthropology, vol. 3), Santa Fé, 1939. Price \$7.50.

Archaeology in the New World offers many tantalizing and difficult problems, from both the historical and the technical points of view. The three monographs reviewed here illustrate approaches to some of these problems, not the least of which is the gross disparity between the size of the New World and the paucity of the man power attacking its Indian History. Colombia, Arizona and New Mexico, and Maryland are the locales covered.

Colombia is a large country, which has not been even roughly sampled archaeologically. An exploratory excavation was essential and this Dr. Mason most successfully undertook. He discovered and documented a large body of material, essential to form a reference point for study. This publication is the third of a series of four monographs, the first of which dealt with the excavations; the second with the classification of objects of stone, bone and metal; the third, under review, deals with pottery. The projected fourth report will present conclusions. Such a work as this will be the foundation for archaeology in northern South America. Dr. Mason did not get stratigraphy, but he hopes by the judicial handling of his grave associations to establish some sort of sequence in what he believes to be a short occupation. Already certain vistas are opening up as to the cultural relations between middle and northern South America.

Dr. Mera has attacked the nebulous zone, where archaeology leaves off and formal historical research begins. He has produced an important, well illustrated memoir on Pueblo pottery during the period of contact with white men and of their later domination from 1540 to the present day. The Southwest has always been important to American archaeology, since the continuum from the far distant past to the present has never been broken. Although the report is directed toward a study of the evolution of ceramic design, it also points the way to the identification of the present Pueblo groups in earlier historical contexts, one of the great tasks still to be accomplished in Southwestern archaeology.

Alice Ferguson's paper is of a type relatively rare in our undocumented history of the American Indian. The author uses archaeological technique to identify the Indian town of Moyaone which was described by Captain John Smith and whose Piscataway Indian inhabitants figure importantly in the colonial history of Maryland. The paper devotes most of its content to digesting this scattered information. While it was not the author's primary purpose and therefore not an oversight on her part, it is a matter of regret to the reviewer that the artifacts found in the site were not described or illustrated more fully.

These three reports show some of the various types of research essential to recovering the history of past peoples, the adequate description of sites and finds, the establishment of culture sequences, their linkage to chronology, and the fusion of historical and archaeological data. Such goals are not easily attained in the American field, but the three reports sample activities along these lines which in many parts of the New World have been conspicuously successful.

GEORGE C. VAILLANT

AMERICAN MUSEUM OF NATURAL HISTORY

NEW YORK

BIBLIOGRAPHY OF ARCHAEOLOGICAL BOOKS-1939

DAVID M. ROBINSON

GENERAL AND MISCELLANEOUS

Agde (H.) Bronzezeitliche Kulturgruppen im mittleren Elbegebiet. Leipzig, 1939, Kabitzsch. vii, 201 pp.; ill. 19.50 M.

Arik (R. O.) Les fouilles d'Alaca Huyuk, entreprises par la société d'histoire turque. Rapport préliminaire sur les travaux en 1935 (Publ. soc. hist. turque, Series 5, no. 1). Paris, 1939, Geuthner. ccc, 119 pp.; 8 pls. in color; figs.; plans and maps. 435 fr.

Autran (C.) Tyr Égéene, son nom et la route de l'Inde. Fasc. 1.2. Paris, 1938, Geuthner. 12 fr.

Blümel (C.) Tierplastik. Bildwerke aus 5 Jahrtausenden. Ausgewähltes. Leipzig, 1939, Schmidt & Günther. 197 pp.: ill. 7 50 M

Ausgewantes. Lepzig, 1939, Schmidt & Gunther. 127 pp.; ill. 7.50 M. Calder (W. M.) and Keil (J.) Anatolian Studies. Presented to William Hepburn Buckler (Publication of the University of Manchester, 265). Manchester, 1939, University Press. xviii, 382 pp.; 11 pls. 25 sh.

Casson (S.) Chypre dans l'antiquité. Trad. de G. Walter. Paris, 1939, Payot. 224 pp.; 1 map; 16 figs. 45 fr.

Childe (V. G.) The Dawn of European Civilization. New enlarged edition. London, 1939, Kegan Paul. 371 pp. 16 sh.

Clark (G.) Archeology and Society. London, Methuen, 1939. 235 pp. 7 s. 6 d.

Commission Internationale pour la Préhistoire de la Méditerranée Occidentale. Travaux de la Conférence de Barcelone en 1935. Paris, 1939, Ed. Universitaires, 50 pp. 48 pls.; 52 fics. 50 fr.

Universitaires. 50 pp.; 48 pls.; 52 figs. 50 fr.

Cumming (Sir John) ed. Revealing India's Past. A coöperative record of archaeological conservation and exploration in India and beyond. London, 1939, India Society. xx, 374 pp.; 33 pls.; 3 maps. 25 sh.

Demircioglu (H.) Der Gott auf dem Stier. Geschichte

Demircioglu (H.) Der Gott auf dem Stier. Geschichte eines religiösen Bildtypus (Neue deutsch. Forschungen. Abt. Alte Gesch. 6). Berlin, 1939, Junker & Dünnhaupt. 151 pp.; 4 pls. 7 M.

Deutsches Archäologisches Institut. Internationaler Kongress für Archäologie, Berlin 21–26. August 1939 (Program). Berlin, 1939, Archäol. Inst. d. deutsch. Reiches. 63 pp.; 1 pl.

Bericht der Römisch-germanischen Kommission. 27, 1937. Berlin, 1939, Reichsverlagsamt. 134 pp.; ill. 10 M.

— Das deutsche archäologische Buch. Den Teilnehmern am 6. Internat. Kongress f. Archäologie, Berlin, 1939, dargebr. v. d. Verlegern. Berlin, 1939, Archäol. Inst. d. deutsch. Reiches. 139 pp.

Dinkler (E.) Die ersten Petrusdarstellungen. Ein archäol. Beitr. zur Geschichte des Petrusprimates (Marburger Jahrbuch f. Kunstwiss. 11). Marburg, 1939, Preuss. Forschungs-Inst. für Kunstgesch. 80 pp.; 30 figs.; 7 pls.

Études de Papyrologie. Tome 5^{me}. Cairo, 1939, Impr. de l'inst. franç. d'archéol. orient. 128 pp. 20 P. T.

Fossing (P.) Glass Vessels before Glass-Blowing. Copenhagen, 1939, Munksgaard. xvi, 150 pp.; 109 figs. 12 kr.

Frobenius (L.) Monumenta Africana. Der Geist e. Erdteils. Weimar, 1939, Böhlau. 272 pp.; 82 maps; 17 figs. 6.80 M. Fry (R.) A Survey of Ancient Art. Introduction by Kenneth Clark. New York, 1939. 320 reproductions. \$5.00.

International Numismatic Congress. Transactions of the International Numismatic Congress held in London, June 30-July 3, 1936. Edited by J. Allan, H. Mattingly and E. S. G. Robinson. London, 1938, Queritch is 490 pp. 26 pls. 30 sh

Quaritch. ix, 490 pp.; 26 pls. 30 sh. Hentzen (A.) Die Meisterwerke der Berliner Gemäldegalerie. Berlin, 1939, Mann. 230 figs. on 224 pls. and frontispiece. 7 M.

Jorns (W.) Die Hallstattzeit in Kurhessen. Berlin, 1939, Unger. 98 pp.; ill.

 Junge (J.) Saka-Studien, der ferne Nordosten im Weltbild der Antike (Klio, N. F. Beiheft 28).
 Leipzig, 1939, Dieterich. iv, 115 pp.; 2 pls. 8 M.
 Kane (J. A.) The Ancient Building Science. Ann Arbor,

Kane (J. A.) The Ancient Building Science. Ann Arbo 1939, Edward Brothers. 207 pp. \$4.00.

Keller (J.) Die Alb-Hegau-Keramik der älteren Eisenzeit (Tübinger Forschungen zur Archäologie u. Kunstgeschichte, Bd. 18). Reutlingen, 1939, Gryphius-Verl. 120 pp.; ill.; 1 map. 15 M.

Lemaire (C. R.) La restauration des monuments anciens. Paris, 1939, Leroux. 240 pp. 120 fr.

Mackay (E. J. H.) and others. Further Excavations at Mohenjo-daro: being an official account of archaeological excavations carried out by the Government of India between 1927 and 1931. Two volumes. London, 1939, Probsthain. 734 pp.; 146 pls.

Marchand (H.) Les industries préhistoriques littorales de la Province d'Alger. Paris, 1939, Ed. Universitaires, 60 pp. 7 pls. 15 fr.

taires. 60 pp.; 7 pls. 15 fr.

Miner (D. E.) ed. The Journal of the Walters Art
Gallery, Vol. II. Baltimore, 1939, the Walters Art
Gallery, John D. Lucas Printing Co. 119 pp.; ill.

Muratov (P.) La pittura russa antica. Trad. di Ettore Lo Gatto. Paris, 1939, Maison du Livre étranger. 63 ill. 90 fr.

Ny Carlsberg Glyptothek. From the Collections of the Ny Carlsberg Glyptothek 1938. Vol. II. Copenhagen, 1939, Ejnar Munksgaard. xi, 256 pp. 22.40 Kr.

Pace (B.) Introduzione allo studio dell'archeologia. Second edition. Naples, 1939, Ricciardi. 255 pp. 16 L.

Petrikovits (H. V.) and Steeger (A.) Festschrift Oxé. Festschrift für August Oxé zum 75. Geburtstag 23. Juli 1938. Darmstadt, 1938, Wittich. viii, 281 pp.; ill.; 24 pls. 12 M.

Potratz (H. A.) Das Pferd in der Frühzeit. Rostock, Rostock, Henstorff, 1938. Pp. 215.

Przeworski (S.) Die Metallindustrie Anatoliens in der Zeit von 1500-700 v. Chr. Rohstoffe, Technik, Produktion. Leiden, 1939, Brill. xii, 206 pp.; 22 pls.; 2 maps. 16 fl.

Raudonikas (W.) Gravures rupestres de la Mer Blanche découvertes en Russie septentrionale en 1926–1937. Paris, 1939, Ed. Universitaires. 165 pp.; 40 figs.; 88 pls. 400 fr.

— Gravures rupestres des bords du lac Onéga. Nouvelles découvertes. Paris, 1939, Ed. Universitaires. 204 pp.; 70 figs.; 83 pls. 400 fr. Raymond (P. E.) Prehistoric Life. Cambridge, Mass., 1939, Harvard University Press. 324 pp. \$5.00. Smith (B. W.) Famous Sieges from Troy to Kut.

London, 1939, Blackie. 224 pp.; 8 pls.; 8 maps.

Smith (C. E.) and Moorhead (P. G.) A Short History of the Ancient World. New York, 1939, Appleton-

Century Co. xvii, 653 pp. \$3.75.

Taeger (F.) Das Altertum. Geschichte und Gestalt.
Bd. 2. Stuttgart, 1939, Kohlhammer. 936 pp.; 48 pls. 18 M.

Toy (S.) Castles: a short history of Fortifications from 1600 B.C. to A.D. 1600. London, 1939, Heinemann. xiv, 241 pp.; 169 figs. 25 sh.

Unger (E.) Altindogermanisches Kunstempfinden (Welt u. Mensch im alten Orient, Nr. 4). Berlin, 1939,

Witting. 20 pp.; ill. 1.75 M.

Van Ingen (W.) Figurines from Seleucia on the Tigris.

Humanistic Series 45. Ann Arbor, 1939, University
of Michigan Press. xxi, 374 pp.; 93 pls. \$5.00.

Walker (W. F.) Bronze Age round Barrow. Hull, 1939,

Museum Aids. 11 pp. 6 d.

Watts (A. P.) A History of Western Civilization. Vol. I: From Ancient Greece through the Renaissance. New York, 1939, Prentice-Hall. 823 pp.; maps. 85.00

Wright (W. B.) Tools and the Man. London, 1939, Bell. 9 pls.; 92 figs. 12/6. Zeitschrift für schweizerische Archäologie und

Kunstgeschichte, hrsg. v.d. Direktion d. Schweiz. Landesmuseums in Zürich. Bd. 1, 1939, Basel, 1939, Birkhäuser. H.l.iv, 64 pp.; ill.

NEAR EAST

Barrois (A.) Manuel d'archéologie biblique. I: Faits d'habitat et activité de producteur (Manuels d'archéologie et d'histoire de l'art). Paris, 1939, Picard.

viii, 521 pp.; 199 figs.; 1 map. 85 fr. Bittel (K.) and Otto (H.) Demirci—Hüyük (Archäologisches Institut des deutsch. Reiches, Zweigstelle

Istanbul). Berlin, 1939, 35 pp.; 15 pls.
Ebeling (E.) Die Siebente Tafel des Akkadischen
Weltschöpfungsliedes Enuma Elis (Mitteilungen der Altorientalischen Gesellschaft, XII, 4). Leipzig, 1939. 29 pp.; 2 pls.

Ehelolf (H.) Texte verschiedenen Inhalts (Keilschrifturkunden aus Boghazköi, Heft XXIX). Berlin, 1938. ix pp.; 50 pls.

-Texte verschiedenen Inhalts (Keilschrifturkunden aus Boghazköi, Heft XXX). Berlin, 1939. vi pp.; 50 pls

Ehrich (A. M. H.) Early Pottery of the Jebeleh Region (Memoirs of the American Philosophical Society, XIII). Philadelphia, 1939, The American Philosophical Society. v, 129 pp.; 24 pls.

Eissfeldt (O.) Ras Shamra und Sanchunjaton (Beiträge zur Religionsgeschichte des Altertums, Heft 4).

Halle/Saale, 1939. xi, 157 pp Frankfort (H.) Cylinder Seals. A documentary essay on the art and religion of the Ancient Near East. London, 1939, Macmillan. xlviii, 328 pp.; 47 pls.;

116 figs. 42 sh. - Sculpture of the Third Millennium B.C. from Tell Asmar and Khafajah (Oriental Institute Publications, XLIV). Chicago, 1939. xiii, 87 pp.; 5 figs.; 116 pls. \$12.00.

Glueck (N.) Explorations in Eastern Palestine, III (The Annual of the American Schools of Oriental Research, XVIII-XIX). New Haven, 1939. xxiv, 288 pp.; 22 pls.; 3 maps

Grant (E.) and Wright (G. E.) Ain Shems Excavations, Part V, Text. Haverford, 1939. 172 pp.

Hrozný (B.) O Nejstarším Stěhováni Národů A O Problému Civilisace Proto-Indiké. Praha, 1939. 28 pp.; 20 pls.

Jacobsen (T.) Cuneiform Texts in the National Museum, Copenhagen, Chiefly of Economical Contents. Leiden, 1939, Brill. xii, 84 pp.; 68 auto-

graphed pls.

The Sumerian King List (Assyriological Studies).

Chicago, 1939. xvi, 216 pp.; 1 pl. \$5.00.

Koeppel (R.) and others. Teleilät Ghassül II (Compte Rendu des Fouilles de l'Institut Biblique Pontifical 1932-1936). Rome, 1940. viii, 140 pp.; 113 pls.;

Kraus (F. R.) Texte zur Babylouischen Physiognomatik (Archiv für Orientforschung, Beiheft 3). Berlin,

1939. 35, 65 pp.

Lacheman (E. R.) Joint Expedition with the Iraq
Museum at Nuzi. Miscellaneous Texts (American
Schools of Oriental Research, Publications of the
Bagdad School, Texts: VI). New Haven, 1939. 512-616 pls.

Lamon (R. S.) and Shipton (G. M.) Megiddo I. Seasons of 1925-34. Strata I-V (Oriental Institute Publica-

tions, XLII). Chicago, 1939. xxvii, 235 pp.; 116 pls. Loud (G.) and others. Khorsabad, Part II. The Citadel and the Town (Oriental Institute Publications, XL). Chicago, 1938. xxi, 115 pp.; 72 figs.; 91 pls. \$30.00.

The Megiddo Ivories (Oriental Institute Publica-

tions, LII). Chicago, 1939. 25 pp.; 63 pls. \$15.00. Meer (P. E. van der) Syllabaries A, B¹ and B with Meer (P. E. van der) Synabaries A, D and D whin Miscellaneous Lexicographical Texts from the Herbert Weld Collection (Oxford Editions of Cuneiform Texts, IV). London, 1938. 72 pp.; 4 pls. Monneret de Villard (U.) Aksum. Ricerche di topografia

generale (Analecta Orientalia, 16). Rome, 1938. x, 138 pp.; 3 pls.

Moortgat (A.) Vorderasiatische Rollsiegel. Berlin,

1939. 96 pls.

Nöldeke (A.), Falkenstein (A.) and others. 9. vorläufiger Bericht über die von der Deutschen Forschungs-gemeinschaft in Uruk-Warka unternommenen Ausgrabungen. Berlin, 1938. 39 pp.; 40 pls. Parrot (A.) Malédictions et Violations de Tombes.

Paris, 1939. 201 pp.; 56 figs. 60 fr.
Salonen (A.) Die Wasserfahrzeuge in Babylonien.

Leipzig, 1939. xvi, 199 pp.; 43 pls. Schaeffer (C. F.-A.) The Cuneiform Texts of Ras

Shamra-Ugarit. London, 1939. xvi, 100 pp.; 39 pls.; charts.

Ugaritica. Paris, 1939. viii, 325 pp. 200 fr. Schmidt (E. F.) The Treasury of Persepolis and Other Discoveries in the Homeland of the Achaemenians (Oriental Institute Communications, 21). Chicago,

1939. xxi, 139 pp.

Shipton (G. M.) Notes on the Megiddo Pottery of Strata VI-XX (Studies in Ancient Oriental Civilization, 17). Chicago, 1939. xiv, 51 pp.; 20 pls.; 6 charts

Starr (R. F. S.) Nuzi I, Text. Cambridge, 1939. xxxviii,

615 pp.; 46 figs. Van Buren (E. D.) The Fauna of Ancient Mesopotamia as represented in Art (Analecta Orientalia, 18). Rome, 1939. xii, 116 pp.; 23 pls.

EGYPT

Černý (J.) Late Ramesside Letters (Bibliotheca Aegyptisca, IX). Leiden, 1939, Brill. xxvi, 154 pp.

Hölscher (U.) and Anthes (R.) The Excavations of Medinet Habu II. The Temples of the Eighteenth Dynasty (Oriental Institute Publications, XLI). Chicago, 1939. xvii, 123 pp.; 96 figs.; 58 pls. \$22.00.

Iversen (I.) Papyrus Carlsberg No. VIII (Det Kgl. Danske Videnskabernes Selskab, Hist.-Fil. Meddeleker XXVI, 5). Copenhagen, 1939.

Michalowski (K.) and others. Fouilles Franco-Polonaises Rapports II: Tell Edfou, 1938. Cairo, 1938. viii, 174 pp.: 164 figs.; 49 pls.; 5 plans. Nagel (G.) La Céramique du Nouvel Empire à Deir el Médineh. Tome I (Documents de Fouilles de l'Institut français d'Archéologie orientale, X). Cairo, 1938. 188 figs.; 18 pls.

Sandford (K. S.) and Arkell (W. J.) Prehistoric Survey of Egypt and Western Asia, IV (Oriental Institute Publications, XLVI). Chicago, 1939. xix, 105 pp.;

23 figs.; 30 pls.; 1 map. \$8.00. Sethe (K.) Vom Bilde zum Buchstaben. Die Entstehungsgeschichte der Schrift (Untersuchungen zur Geschichte und Altertumskunde Ägyptens, XII). vii, 84 pp.; 2 pls.; 24 figs. 24 M.

CLASSICAL ARCHAEOLOGY

GREEK AND ROMAN

(Works treating of the monuments of the Greeks and the Romans, but not exclusively of either.)

Arndt (P.) and Lippold (G.) Photographische Einzelaufnahmen antiker Sculpturen. Serien zur Vorbereitg e. Corpus statuarum. Serie 16 A, Text u. Taf. Munich, 1939, Bruckmann. Taf. Nr. 4501-4650 120 M

Bieber (M.) The History of the Greek and Roman Theater. Princeton, 1939, Princeton University Press. ix, 467 pp.; 566 figs. \$7.50.

Caracciolo (E.) La civiltà mediterranea ed i suoi centri urbani. 1: Dal periodo paleolítico alla spartizione tetrarchica del Mediterraneo. Palermo, 1938,

Castiglia. 51 pp. Δράγμα. Martino P. Nilsson dedicatum. Lund, 1939, Håkan Ohlssons Boktryckeri. 656 pp. 15 Swedish

Ducati (P.) L'arte classica. Third ed. rev. Turin, 1939, Utet. 857 pp.; ill.; 12 pls. 140 L. Faure (E.) Histoire de l'art. I: L'art antique (Coll. Art

et Historia publ. sous la direct. de J. et R. Wittmann). Paris, 1939, Plon. 60 fr.

Friedländer (P.) Spätantiker Gemäldezyklus in Gaza. Des Prokopios von Gaza "Εκφρασις Είκόνος. Vatican City, 1939, Biblioteca Apostolica Vaticana. 120 pp.; 12 pls.

Graindor (P.) Terres cuites de l'Égypte greco-romaine.

195 pp.; and 32 pp. with pls.

Hinks (R.) Myth and allegory in ancient art (Studies of the Warburg Institute, 6). London, 1939, The Warburg Institute. 135 pp.; 32 figs. 18 sh. Luschey (H.) Die Phiale (Diss.). Carl Nieft Bleicherode

am Harz, 1939, 163 pp.; 10 pls.

Milne (J. G.) Greek and Roman Coins and the Study of

History. London, 1939, Methuen. 144 pp.; ill. 6 sh.

Otto (W.) ed. Handbuch der Archäologie. Text, Vol. I, part 6: pp. i–xx, 643–873; 45–88 figs.; 1 map. Plates, Vol. I, part 6: i–xxxvi pp.; 113–204 pls. Munich, 1939, Beck. 20.75 M. Turner (E. G.) Catalogue of Greek and Latin Papyri

and Ostraca in the possession of Aberdeen (Aberdeen University Studies 116). Aberdeen, 1939,

University Press. xix, 116 pp. 8/6.

Valmin (N.) Das adriatische Gebiet in Vor- und Frühbronzezeit. Lund, 1939, Gleerup; Leipzig, 1939, Harrassowitz. 243 pp.; ill.; 1 map. 6.50 M.

Zschietzschmann (W.) Die hellenistische und römische

Kunst (Die antike Kunst, Bd. 2, T.2; Handbuch d. Kunstwissenschaft). Potsdam, 1939, Athenaion. 180 pp.; figs.; 10 pls. 17.30 M.

GREEK

(Including titles relating to pre-Hellenic inhabitants of Greece and to kindred peoples, and to monuments of Greek art wherever found.)

I. GENERAL AND MISCELLANEOUS

Boas (G.) ed. The Greek Tradition. Papers contributed to a symposium held at the Baltimore Museum of Art. Baltimore, 1939, The Johns Hopkins Press. 217 pp.; ill. \$2.25.

Boehringer (R.) and (E.) Homer. Bildnisse u. Nachweise. Bd. 1: Rundwerke. Breslau, 1939, Hirt.

152 pp.; 121 pls. 48 M. Bogner (H.) Der Seelenbegriff der griechischen Frühzeit. Vortr. (Schriften d. Reichsinst. f. Geschichte d. neuen Deutschland). Hamburg, 1939, Hanseat.

Verl. Anst. 39 pp. 1.50 M.

Botsford (G. W.) Hellenic History, revised and rewritten by C. A. Robinson, Jr. New York, 1939, Macmillan. xiv, 398 pp.; 8 figs.; 72 pls.; 17 maps. \$4.50. Brewster (R.) The Island of Zeus: Wanderings in Crete.

London, 1939, Duckworth. 360 pp.; 32 figs. 15 sh. Buckler (W. H.) and Calder (W. M.) editors. American Society for Archaeological Research in Asia Minor. Monumenta Asiae Minoris antiqua, Vol. 6. Monuments and Documents from Phrygia and Caria. Manchester, 1939, Manchester University Press.

xxii, 166 pp.; 4 figs.; 73 pls. 40 sh. Buschor (E.) Grab eines attischen Mädchens. Munich, 1939, Bruckmann. 58 pp.; 48 pls. 4.80 M.

Casson (S.) Ancient Greece: a study. Oxford, 1939, Oxford University Press. 108 pp. 5 sh. Chapouthier (F.) Mallia, deux épées d'apparat. Paris, 1939, Geuthner. 62 pp.; 32 text figs.; 20 pls.; frontispiece. 120 fr.

and Demargne (P.) Fouilles exécutées à Mallia. Troisième rapport: Exploration du Palais (1927-1928) (École française d'Athènes. Études crétoises, VI). Paris, 1939, Geuthner

Dervenn (C.) Iles de Grèce, d'Ithaque à Samothrace.

Paris, 1939, Gigord. 240 pp. 20 fr.

Dörpfeld (W.) Alt-Athen und seine Agora. Untersuchungen über die Entwicklung der ältesten Burg und Stadt Athen und ihres politischen Mittel-punktes, des Staatsmarktes. Heft 2. Berlin, 1939, Mittler. 133–304 pp.; 11–20 figs.; IX–XVI pls. 6 M. Durant (W.) The Life of Greece (The Story of Civiliza-

tion, Part 2). New York, 1939, Simon & Schuster. xviii, 755 pp.; 64 figs.; 1 table; maps. \$3.95. Fink (J.) Die Haartrachten der Griechen in der ersten

Hälfte des ersten Jahrtausends vor Christus. Würzburg-Aumühle, 1938, Triltsch. 100 pp.

— and Weber (H.) Beiträge zur Trachtengeschichte Griechenlands. Würzburg, 1939, Triltsch. 159 pp. Heurtley (W. A.) Prehistoric Macedonia: an archaeological reconnaissance of Greek Macedonia (West of the Struma) in the Neolithic, Bronze and Early Iron Ages. Cambridge, 1939, Cambridge Univer-

sity Press. 394 pp. 3/3/0.

Holmberg (E. J.) Excavations at Asea in Arcadia 1936-38. Preliminary report (Göteborgs Hogsk. Arsskr. 45, 1939, 3). Göteborg, 1939, Wettergren & Kerbers Förlag. 30 pp.; 8 figs.; 15 pls.; 1 map.

6 Kr.

Jaeger (W.) Paideia: The ideals of Greek culture. Trans. from the second German ed. by G. Highet.

Oxford, 1939, Blackwell. xxix, 420 pp. 15 sh. Kraiker (W.) and Kübler (K.) Kerameikos, Ergebnisse der Ausgrabungen, Band I: Die Nekropolen des 12. bis 10. Jahrhunderts. Beitrag von Emil Breitinger. Berlin, 1939, de Gruyter. x, 266 pp.; 14 text figs.; 99 pls.; 2 maps. 65 M.

Lapalus (É.) Exploration Archéologique de Délos, fasc. xix. L'Agora des Italiens. Paris, de Boccard, 1939.

xi, 114 pp.; 24 pls.

Matz (F.) Die griechische Kunst (Auf dem Wege zum nationalpolit. Gymnasium, H. 9). Frankfurt a. M., 1939, Diesterweg. 64 pp.; 24 pls. 3.80 M.

Maurras (C.) Le voyage d'Athènes (Édition d'histoire

et d'art). Paris, 1939, Plon. 144 pp. 50 Fr. Metropolitan Museum of Art. Early Greek Art: A

picture book. New York, 1939, Metropolitan Mu-

seum of Art. 4 pp.; 20 pls. 80.25.

Meyer (E.) Geschichte des Altertums. Bd. 4. Das
Perserreich und die Griechen. Abt. 1: Bis zum
Vorabend des Peloponnesischen Krieges. 3. verb.

Aufl. Stuttgart, 1939, Cotta. 29.50 M. Meyer (E.) Peloponnesische Wanderungen. Reisen u. Forschgn. zur antiken u. mittelalterl. Topographie von Arkadien u. Achaia. Zurich and Leipzig, 1939, Niehaus. xvi, 148 pp.; 12 pls.; maps. 9 M.

Οίκονόμος (Φ.) 'Ιθάκη ή άμφίαλος. Athens, 1939. 70 pp.;

11 figs.

Parke (H. W.) A History of the Delphic Oracle. Oxford, 1939, Blackwell. viii, 457 pp.; frontispiece, 7 pls. 21 sh

Pearson (L.) Early Ionic Historians. Oxford, 1939, Clarendon Press. vi, 240 pp. 15 sh. Pendlebury (J. D. S.) The Archaeology of Crete. An

Introduction. London, 1939, Methuen. xxxii, 400

pp.; 53 figs.; 43 pls.; 24 maps. 30 sh. Philippson (P.) Griechische Gottheiten in ihren Landschaften (Symbolae Osloenses Fasc. Supplet. IX).

Oslos, 1939, A. W. Brøgger. 83 pp.; 16 pls.
Roussel (P.) Sparte. Paris, 1939, Boccard. 220 pp.;

Rüssel (H.) Alkibiades. Berlin, 1939, Verl. Die Runde. 294 pp. 6 M. Scheffer (T. v.) Die Kultur der Griechen. New York,

1939, Oxford University Press (Phaidon Press)

647 pp.; 233 pls. \$2.50. Schlesinger (K.) The Greek Aulos. A study of its mechanism and of its relation to the modal system of ancient Greek music, followed by a survey of the Greek harmoniai in survival or rebirth in folk-music. London, 1939, Methuen. 1,577 pp.; 18 pls.

Stow (H. H.) Greek athletics and festivals in the fifth century. Boston, 1939, The Museum of Fine Arts.

29 pp.; 40 pls. \$5.00. Webster (T. B. L.) Greek Art and Literature 530–400 B.C. Oxford, 1939, The Clarendon Press. xx, 218 pp.; 24 pls. 15 sh.

Welter (G.) Troizen und Kalaurea. Berlin, 1939, Mann. 160 pp.; 44 pls. 30 M.

Westholm (A.), Frödin (O.) and Persson (A.) Asine. Results of the Swedish Excavations 1922–1930. Stockholm, 1939. vii, 452 pp.; 283 figs.; 3 pls. in color, 50 Kr.

Willemsen (F.) Frühe griechische Kultbilder (Diss.) Munich, 1939.

Young (R. S.) Late Geometric graves and a seventh century well in the Agora. Cambridge, Mass., 1939. Harvard University Press, for the American School of Classical Studies at Athens. ix, 250 pp.; 156 figs. \$5.00.

II. GREEK ARCHITECTURE

Krauss (F.) and Herbig (R.) Der korinthisch-dorische Tempel am Forum von Paestum (Archäol. Inst. d. deutsch. Reiches. Denkmäler antiker Architektur, 7). Berlin, 1939, de Gruyter. 81 pp.; ill.; 51 pls.

Rodenwaldt (G.) ed. Korkyra: Archaische Bauten und Bildwerke. With chapters by W. Dörpfeld, G.

Klaffenbach, J. Papadimitriu, K. A. Rhomaios, and H. Schleif. Three volumes. I: Der Artemistempel. II: Die Bildwerke des Artemistempels. III: Der Tempel von Kardaki. Berlin, 1939, Mann. I: 150 pp; 80 drawings; 150 figs. on 50 pls. II: 208 pp.; 176 figs.; 34 pls. III: 180 pp.; 25 drawings; 34 pls. 75 M. each part.

Wiegand (T.) Didyma, Three volumes, I: Text, II: 530 photographs. III: 90 pls. of drawings. Berlin, 1939, Mann. Subscription price for three volumes 195 M.

Later price 230 M.
 Wolfer-Sulzer (L.) Das geometrische Prinzip der griechischdorischen Tempel. Winterthur, 1939, Vogel. 40 pp. 4.80 M.

III. GREEK SCULPTURE

Alaux (J. P.) La Vénus de Milo et Olivier Voutier. Paris, 1939, La Maison du Livre français. 210 pp.;

28 figs. 180 fr.

Budde (L.) Die attischen Kuroi. Würzburg-Aumühle,
1939, Triltsch. 63 pp.; 1 pl. 2.10 M.

Bulle (H.) Tarentiner Apollonkopf. Berlin, 1939, de

Gruyter (Winckelmannsprogr. d. Archäol. Ges. zu

Gruyter (Winckelmannsprogr. 1. Archael Berlin, 99). 28 pp. 2 pls. 7 M. Charbonneaux (J.) La sculpture grecque archaique. Paris, 1939, Ed. de Cluny. 112 pp.; 112 figs. 50 fr. Grace (F. R.) Archaic Sculpture in Boeotia. Cambridge, Mass., 1939, Harvard University Press. viii, 86 pp.;

83 figs. \$5.00. Mosel (J.) Studien zu den beiden archaischen Reliefbasen von Kerameikos (Diss.). Rostock, 1938. 50 pp.; 2 pls. Picard (C.) Griechische Plastiken des 5. Jahrhunderts v.

ra (C.) Griechische Plastiken des 5. Jahrhunderts v. Chr. Introd. by C. P. (Die Samml. Parthenon). Berlin, 1939, Günther in Komm. 40 pls. 2.83 M. -Manuel d'archéologie grecque. La Sculpture, II: Période classique V° siècle. Paris, 1939, Picard.

refroue classique v siècle. Paris, 1999, Fleard.
1016 pp.; 366 figs.; 18 pls. 235 fr.
Rumpf (A.) Die Meerwesen auf den antiken Sarkophagreliefs (Die antiken Sarkophagreliefs 5, 1. Archäol.
Inst. d. deutsch. Reiches). Berlin, 1939, Grote.
x, 150 pp.; 60 pls. 180 M.
Schrader (H.) with chapters by E. Langlotz and W.-H.

Schuchardt. Die archaischen Marmorbildwerke der Akropolis. Frankfurt a.M., 1939, Vittorio Klostermann. xvii, 399 pp.; vi pp.; 200 pls. 180 M.

IV. GREEK VASES

Greifenhagen (A.) Griechische Vasen auf Bildnissen der Zeit Winckelmanns und des Klassizismus (NGG. Philol.-hist. K1. 1, 3, 7). Göttingen, 1939, Vanden-hoeck & Ruprecht. 199–230 pp.; 2 figs.; 11 pls. 6.50 M.

Lullies (R.) Corpus Vasorum Antiquorum. Deutschland, Bd. 3: München, Museum antiker Kleinkunst (I).

Munich, 1939, Beck, 38 pp.; 52 pls. 20 M.

Méautis (G.) Les chefs-d'oeuvres dela Peinture Grecque.
Paris, 1939, Albin Michel. 228 pp.; 74 pls. 50 fr.

Smith (H. R. W.) Der Lewismaler (Polygnotos II).
(Bilder griech. Vasen 13). Leipzig, 1939, Keller.
30 pp.; 56 pls. 28 M.

Webster (T. B. L.) and Charlton (J. M. T.) Some unpublished Greek Vases (Memoirs and Proceedings of the Manchester Literary and Philosophical Society, Vol. 83). Manchester, 1939, 36 George St. 19 pp. 1 sh. 6 d.

V. GREEK INSCRIPTIONS

Blinkenberg (C.) Deux documents chronologiques rhodiens (Extr. de l'Acad. roy. de Danemark, Sect. Archéol. et Histoire de l'Art, II, 4). Copenhagen, 1938, Munksgaard. 32 pp. 2 Kr.

Dinsmoor (W. B.) The Athenian Archon List in the Light of Recent Discoveries. New York, 1939,

Columbia University Press. viii, 315 pp. \$4.50. Evelyn-White (H. G.) and Oliver (J. H.) The Temple of Hibis in el Khārgeh Oasis, Part II: Greek Inscriptions (Publications of the Metropolitan Museum of Art Egyptian Expedition, Vol. 14). New York, 1939, Metropolitan Museum of Art. xvi, 74 pp.; 13 nls 83 50

Hondius (J. J. E.) Saxa Loquuntur. Leyden, 1939, A. W. Sijthoff. 3.50 fl.

Valmin (N.) Les Inscriptions du théâtre (Fouilles de Delphes, 3. Épigraphie, 6). Paris, 1939. Boccard. vi, 165 pp.; 4 pls. 180 fr.

VI. GREEK COINS

Caley (E. R.) The Composition of Ancient Greek Bronze Coins (American Philosophical Society Memoirs, Vol. XI). Philadelphia, 1939, American Philosoph-

ical Society. viii, 203 pp.; 5 figs.; 4 pls. \$2.50.

Forrer (L.) Portraits of royal ladies on Greek coins (Reprinted from numismatic circular). London, 1939,

Spink. 72 pp.; ill. 4 sh.

May (J. M. F.) The coinage of Damastion and the lesser coinages of the Illyro-Paeonian region. London, 1939, Oxford University Press. xiv, 207 pp.; 12 pls.; 1 map. 10/6 or \$3.50.

Rizzo (G. E.) Saggi preliminari sul'arte della moneta

nella Sicilia greca. Rome, 1938, Ist. poligr. dello Stato. 107 pp. 90 L. Robinson (E. S. G.) Sylloge Nummorum Graecorum. Vol. III. The Lockett Collection. Part II, Sicily -Thrace (gold and silver). London, 1939, Milford. 12 pp.; 12 pls., figs. 687-1279. 15 sh.

ROMAN

(Including titles of works relating to the monuments of the Etruscans and other peoples who inhabited Italy before or contemporaneously with the Romans, as well as to Roman monuments outside Italy.)

I. GENERAL AND MISCELLANEOUS

Bertolone (M.) Lombardia romana, II: Repertorio dei ritrovamenti e scavi di antichità romane avvenuti in Lombardia. Part 1: Alto milanese, Regione varesina, Comasco, Canton, Ticino, Chiavennasco, Valtellina e parte dei Grigioni. Milan, 1939, Ceschina. 389 pp.; 4 pls. 60 L.

Orme di Roma nella regione varesina. Nel bimillenario della nascità di Augusto. Milan, 1939, Ce-

schina. 176 pp.

Bloch (H.) I bolli laterizi e la storia edilizia romana. Contributi all'archeologia e alla storia romana, 3. Rome, 1939, Colombo. 193-353 pp.; 31-45 figs.

Bonnard (A.) Rom im Bild. Einführung von A. B. Berlin, 1939, Gunther. 4 pp.; 40 pls.

Cambridge Ancient History. Volume XII. The Imperial Crisis and Recovery, A.D. 193–324. Edited by S. A. Cook, F. E. Adcock, M. P. Charlesworth, and N. H. Baynes. Cambridge, 1939, University Press; New York, 1939, Macmillan. xxvii, 849 pp.; 10 maps; plans. \$10.00.

 Volume of Plates, V. Prepared by C. T. Seltman.
 Cambridge, 1939, University Press; New York, 1939, Macmillan. xv pp.; 121 pp. of illustrations, each faced by descriptive text. \$4.00.

Carcopino (J.) La vie quotidienne à Rome à l'apogée de l'empire. Paris, 1939, Hachette. 348 pp. 25 fr.

Chiaudano (M.) La strada romana delle Gallie. Testo e note di M. C., fotografie di Domenico Riccardo Peretti Griva. Turin, 1939. 39 pp.; 15 pls.

Chimienti (G.) Cesare Augusto e il Monumento Ancirano. Trieste, 1938, Libreria Minerva. 110 pp.; 1 pl. Ciccotti (E.) Profilo di Augusto. Turin, 1938, Enaudi. 157 pp. 12 L.

Colominas Rocas (J.) Terres cuites carthaginoises d'Eivissa (en Espagne). Paris, 1939, Ed. Universitaires. 36 pls. 60 fr.

Corradi (G.) Le Strade romane dell' Italia occidentale.
Paravia, Turin, 1939. iv, 81 pp.; 12 pls; 3 maps. 9 L.
Della Corte (M.) Piccola guida di Pompei. Pompei,
1939, Sicignano. 80 pp.; figs.; 18 pls.; 1 plan. 5 L.

Della Corte (E.) Catalogo sistematico descrittivo delle fotografie dei monumenti pompeiani esistenti nell'archivio fotografico della R. Soprintendenza alle antichità della Campania. Museo Nazionale, Napoli. Part 1, 1905–1932. Fotografie 1–2500, elencate sotto i nn. 1–2351. Rome, 1939, Palombi. 121 pp. 15 L.

Donnadieu (A.) Le canal de dérivation de l'Argens dans le port de Fréjus à l'époque romaine. Le phare du port romain. Paris, 1939, Ed. Universitaires. 12 pls.

25 fr. Dubois (C.) Le vicus romain de Vertunum (Vieux-Virton, Majerore, Belgique). Fouilles et monu-ments. Paris, 1939, Ed. Universitaires. 80 pp.;

2 pls. figs., 25 Fr.

Ducati (P.) L'arte in Roma dalle origini al secolo VIII.

Bologna, Capelli, 1938. 500 pp. 303 pls. Ducati (P.) Voci di Etruria. Bologna, 1939; Testa. 207 pp.; 20 pls. 15 L.

Duhn (F. v.) Italische Gräberkunde. T.2. (Published after the death of von Duhn under supervision of Franz Messerschmidt). Heidelberg, 1939, Winter. xv, 383 pp.; 6 figs.; 40 pls.; 5 maps. 31 M. Evans (E. C.) The cults of the Sabine territory (Papers

and Monographs of the American Academy in Rome, vol. XI). New York, 1939, American Academy in Rome. xv, 254 pp.; 7 pls.

Gordon (A. E.) The Cults of Lanuvium (Univ. of Cal-

Gordon (A. E.) The Cuits of Lanuvium (Univ. of California Publ. in Cl. Arch. 2, 2,). Berkeley, 1938, Univ. of Cal. Press. 47 pp. 80.35.

Götze (B.) Ein römisches Rundgrab in Falerii. Baugeschichte d. röm. Adels- u. Kaisergrabes. Grabbau u. Bauplanung des Augustus. Stuttgart, 1939, Kohlhammer. x, 88 pp.; 24 figs.; 4 pls. 15 M.

Guicciardini (P.) Antiche strade della Media Valdelsa. Florence, 1939, Tipocalcogr. classica. 52 pp.; 4 pls.

Lamboglia (N.) Liguria romana. Studi storico-topo-grafici. Vol. I (1st. di Studi romani, Sez. Ligure. Italia romana). Rome, 1939, Ist. di studi romani. 280 pp.; 106 figs.; 13 pls. 35 L. Larguier (L.) Les trésors de Palmyre. Paris, 1938, Plon.

256 pp. 20 fr. Lugli (G.) Aspett imonumentali della Roma Augustea. Rome, 1938, Ist. di studi romani. 14 pp.; 4 pls. 4 L.

Maiuri (A.) Pompeji. Kultur und Kunst einer antiken Stadt. Stuttgart, 1939, Hallwag. 60 pp. 6.50 M. Mauceri (L.) Il castello Eurialo nella storia e nell'arte. Syracuse, 1939, Az. usonoma per la stazione di turismo. 88 pp.; 6 pls.; ill. McCracken (G.) A History of Ancient Tusculum

(Microfilm: ADI document no. 1181). Washington, 1939, American Documentation Institute. xxxi,

521 pp.; 160 figs. \$3.68. Pallottino (M.) Gli Etruschi. Rome, 1939, Colombo.

295 pp.; 28 pls. 25 L. Pope (R. M.) On Roman Roads with St. Paul. London,

1939, Epworth Press. 144 pp. 6 sh.

Praschniker (C.) L'arte dell'Impero di Roma nelle raccolte e negli studi austriaci (Quad. Augustei. Studi stranieri, 15). Rome, 1939, Ist. di Studi romani. 21 pp.; 2 pls. 3 L.

Rossi (A.) Preface. Il santuario di Pompei. I lavori di ampliamento. Rome, 1939, Impresa Castelli. 77 pp.

Rostovtzeff (M. I.), Brown (F. E.) and Welles (C. B.) Excavations at Dura-Europos. Preliminary report of the 7th and 8th seasons of work, 1933–1934 and 1934–1935. New Haven, 1939, Yale University

Press. 461 pp.; 58 pls. 87.50.

Roubier (J.) Rom im Bild. Einführung von Abel Bonnard. Lichtbilder v. J. R. (Die Sammlung Parthenon). Berlin, 1939, Günther in Komm., 40 pp.; ill. 2.85 M.

Saatmann (K.), Jüngst (E.) and Thielscher (P.) Caesars Rheinbrucke (Ext. from Bonner Jahrbücher, H. 143). Berlin, 1939, Weidmann. 83-212

pp.; 21 figs.; 8 pls. 3.80 M. Säflund (G.) Le Terremare delle provincie di Modena, Reggio Emilia, Parma, Piacenza (Skrifter utg. av Svenska Inst. i Rom. 7). Lund, 1939, Gleerup; Leipzig, 1939, Harrassowitz. 265 pp.; 98 pls. 27 M. Sautel (I.) Maison-la-Romaine. Les sites et les monu-

ments. Paris, 1939, Éd. Universitaires. 160 pp.; 64 pls.; figs. 175 fr.

Sellye (I.) Les bronze émaillés de la Pannonie romaine. Avec une appendice par K. Exner (Dissertationes Pannonicae 2.8). Budapest, 1939, Institut f. Münzkunde u. Archäologie d. Pázmány-Univ. 91 pp.; 20 pls. 28 pengö.

Shaw (C.) Etruscan Perugia (The Johns Hopkins University Studies in Archaeology, No. 28). Baltimore, 1939, The Johns Hopkins Press. 115 pp.; 23 ill.

Silvi (B.) Storia romana. Corso di epigrafia. Anno accademico 1938-39, XVII (R. Univ. di Torino).

Torino, 1939, Gili. 68 pp.
Slaughter (G.) Calabria: The First Italy. Madison,
1939, The University of Wisconsin Press. xiv,

326 pp.; 46 pls. \$4.00. Studi Etruschi, XII. Florence, 1939, Rinascimento del

Libro. 481 pp.; 63 pls. 175 L. Sutherland (C. H. V.) The Romans in Spain, 217 B.C.

A.D. 117. London, 1939, Methuen. 275 pp.; ill. 8/6.

Tanzer (H.) The Common People of Pompeii: A Study
of the Graffiti (The Johns Hopkins University Studies in Archaeology, No. 29). Baltimore, 1939, The Johns Hopkins Press. 113 pp.; 49 ill. \$3.00. Taramelli (A.) and others. Sardegna romana, II. Rome,

1939, İst. di studi romani. 117 pp. 22 pls. 15 L. Wartburg (W.v.) Die Entstehung der romanischen Völker. Halle, 1939, Niemeyer. vii, 180 pp.; maps; chart. 9.50 M

II. ROMAN ARCHITECTURE

Blanckenhagen (P.-H.v.) Flavische Architektur und ihre Dekoration am Beispiel des Nervaforums. Berlin, 1939, Mann. 120 figs. on 48 pls. 35 M. The British School at Rome. Notes on Roman Buildings.

Rome, 1939. 31 pp.

Haftmann (W.) Das italienische Säulenmonument. Versuch zur Geschichte einer antiken Form d. Denkmals und Kultmonuments und ihrer Wirk-samkeit f.d. Antikenvorstellung d. Mittelalters und f.d. Ausbildung des öffentlichen Denkmals in der Frührenaissance (Beitr. z. Kulturgesch. d. MA. u. d. Renaissance, 55). Leipzig, 1939, Teubner.

166 pp. 6 M. Kähler (H.) Die römischen Kapitelle des Rheingebiets Berlin, 1989, de Gruyter. 100 pp.; 14 figs.; 16 pls.;

7 Beil. 15 M.

Lyngby (H.) Die Tempel der Fortuna und der Mater Matuta am Forum Boarium in Rom. Berlin, 1939, Ebering. xi, 58 pp. 3 M. Pesch (P. H.) Das Römerbad in Zülpich. Euskirchen,

1939, Herbelsheimer. 4 Bl.; 4 Bl. Abb. 0.25 M.

Plat (G.) L'art de bâtir en France des Romains à l'an 1100. D'après les monuments anciens de la Touraine, de l'Anjou et du Vendomois. Paris, 1939, Les Ed. d'art et d'hist. 228 pp.; 40 text figs.; 65 figs. on 17 pls. 90 fr.

III. ROMAN SCULPTURE

Budde (E. G.) Ed. Römische Köpfe (Das Meisterwerk. R. Plastik). Berlin, 1939, Weise. 10 pp.; 20 pls.

Esperandieu (E.) Recueil général des bas-reliefs, statues et bustes de la Gaule romaine. T. 11. Paris, 1939, Les Belles Lettres. 128 pp. 110 fr.

Les Belles Lettres. 128 pp. 110 fr. Gross (W. H.) Bildnisse Trajans. Berlin, 1939, Mann. 144 pp.; 100 figs.; 48 pls. 30 M. L'Orange (H.) and von Gerkan (A.) Studien zur spätantiken Kunstgeschichte, X: Der spätantike Bildschmuck des Konstantinsbogens. Two volumes Berlin, 1939, de Gruyter. I: text, xii, 238 pp.; 33 pls. with 65 figs. II: Plates, 50. 126 M.

Poulsen (F.) Römische Privatporträts und Prinzen-bildnisse (Det Kgl Danske Videnskabernes Selskab. Archaeol.-kunsthist. Meddelser. 2, 5). Copen-hagen, 1939, Munksgaard. 46 pp.; 46 pls. 7.50 Kr. Wegner (M.) Die Herrscherbildnisse in antoninischer

Zeit (Das röm. Herrscherbild, 2, 4. Archäol. Inst. d. deutsch. Reiches). Berlin, 1939, Mann. 305 pp.; 64 pls. 30 M.

IV. ROMAN MOSAICS AND PAINTING

Maiuri (A.) Die Fresken von Pompeji und Herkulaneum. Einführung von A. M. Berlin, 1939, Günther. — Pompejanische Fresken. Introd. by A. M. (Die Samml. Parthenon). Berlin, 1939, Günther in Komm. 40 pp.; ill. 2.85 M. Wirth-Bernards (H.) Über das Heliosmosaik aus Münster bei Bingerbrück. Bonn, 1939, 12 pp.; 1 pl.

V. ROMAN POTTERY

Krizek (F.) Terra Sigillata in der Slowakei. Brno. 1939. 95 pp.; 10 pls.; 1 map. 25 Kr.

VI. ROMAN EPIGRAPHY

Hoffiller (V.) and Saria (B.) editors. Antike Inschriften aus Jugoslavien. Part I: Noricum und Pannonia Superior. Hague, 1939, Martinus Nijhoff. viii, 279 pp.; numerous illustrations. 75 M.

Menicucci (E.) La grande iscrizione di Perugia spiegata. Studio analitico e comparativo della lingua etrusca. Naples, 1939, Tipomeccanica. 265 pp.

VII. ROMAN COINS

Bellinger (A.) The Eighth and Ninth Dura Hoards (Numismatic Notes and Monographs, No. 85). New York, 1939, American Numismatic Society. 92 pp.; 5 figs.; 13 pls.; map, table. \$2.00.

Blanchet (A.) L'Impero di Roma nelle monete della Gallia, nelle raccolte e negli studi numismatici di Francia. Rome, 1939, Ist. di studi romani. 25 pp. 3 L.

Manns (F.) Münzkundliche und historische Untersuchungen über die Zeit der Illyrerkaiser. Au-relianus (Diss.) Berlin, 1939. vi, 65 pp.

Newell (E. T.) Late Seleucid Mints in Ake-Ptolemais and Damascus (Numismatic Notes and Monographs, No. 84). New York, 1939, At Numismatic Society. 107 pp.; 17 pls. \$2.00. American

Pink (C.) L'Impero di Roma nelle monete del Norico, nelle raccolte e negli studi numismatici austriaci. Rome, 1939, Ist. di studi romani. 13 pp. 2 L.

Die Münzpragung der Ostkelten und ihrer Nachbarn (Dissertationes Pannonicae, II. 15). Budapest, 1939, Institut für Münzkunde und Archäologie der P. Pázmány Universität. 159 pp.; 30 pls.; map.

EARLY CHRISTIAN AND BYZANTINE

- Bailly (A.) Byzance. Paris, 1938, Fayard. 450 pp. 22 Fr.
 Bettini (S.) La pittura bizantina. Parte seconda. I
 Mosaici. Florence, 1939, N.E.M.I. 66 pp. 5 L.
- Du Mesnil du Buisson Les Peintures de la Synagogue de Doura-Europos. Pont. Ist. Biblico, Rome, 1939.
- xxiv, 190 pp.; 61 pls.

 Caiger (S.) Archaeology and the New Testament.

 London, 1939, Cassell. 204 pp. 4/6.

 Cott (P. B.) Siculo-Arabic Ivories (Princeton Monographs in Art and Archaeology: Folio Series: III).

 Princeton, 1939, Princeton University Press; London don, Oxford University Press; the Hague, Martinus Nijhoff. 68 pp.; 490 figs. on 80 pls. \$20.00.
- Dictionnaire d'archéologie chrétienne. Fasc. CLIV-CLVII: Perse-Porter. Paris, 1939, Letouzey et Ané. 30 fr. each.

- Dinkler (E.) Die ersten Petrusdarstellungen. Marburg, 1939. Preuss. Forschungsinst. 80 pp.; 30 figs.;
- Lesley (P.) Early Christian, Byzantine and Romanesque Art. Detroit, 1939, Institute of Arts. 62 pp.; ill.
- Lietzmann (H.) and Eltester (W.) editors. Zeitschrift für die neutestamentliche Wissenschaft und die Kunde der älteren Kirche. Begr. v. Erwin Preus-chen. Bd. 38, 1939. Berlin, 1939, Töpelmann. 247 pp. 16 M.
- Nagy (T. v.) Die Geschichte des Christentums in Pannonien bis zu dem Zusammenbruch des römischen Grenzschutzes (Diss. Pannon. ev Inst. numismat. et archeol. Univ. de Petro Pázmány nominatae Budapest, provenientes, 2, 12). Leipzig, 1939, Harrassowitz. 249 pp. 20 M.
- Staffolani (C.) Il ponte romano e le porte medioevali di Solestà in Ascoli Piceno. Ascoli Piceno, 1939,
- Cesari. 22 pp.; 1 pl.
 Wulff (O.) Altebristliche und byzantinische Kunst. Bibliogr.-krit. Potsdam, 1939, Athenaion. 88 pp.; ill. 7.80 M.